

For Reference

NOT TO BE TAKEN FROM THIS ROOM

March 1917

Ex LIBRIS
UNIVERSITATIS
ALBERTAEÆNSIS



THE UNIVERSITY OF ALBERTA
ENGLISH PROFICIENCY SCORES AND ACHIEVEMENT
OF THAI STUDENTS

by



ASHARA SRISUTHEP

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

SPRING, 1972



Digitized by the Internet Archive
in 2019 with funding from
University of Alberta Libraries

<https://archive.org/details/Srisuthep1972>

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "English Proficiency Scores and Achievement of Thai Students" submitted by Ashara Srisuthep in partial fulfilment of the requirements for the degree of Master of Education.

ABSTRACT

This study was undertaken to investigate the relationships among (1) the scores of six administrations of the test of English as a Foreign Language (TOEFL), (2) the ratings of two Interview Panels for selection of the participants, and (3) the Final Grade Point Averages (GPA) of 98 Thai graduate students in Education studying at The University of Alberta in 1967, 1968 and 1969. An examination was also conducted concerning the predictors of GPA and the relationships between the participants' characteristics and GPA. A further investigation was carried out for the 1969 group concerning the feeling towards the TOEFL test experiences, and the relationship between GPA and gain or loss in scores in the Fall administration.

The results of the study were as follows:

A significant positive relationship existed between the Summer and Fall TOEFL Total and Subtest Scores, the Interview Panel Rating (1968) Scores, and Final GPA.

A significant positive relationship existed between the Interview Panel Rating Scores (1967 and 1968), and the Summer and Fall TOEFL Scores.

The Writing Ability and the Vocabulary Subtest Scores of TOEFL were the best predictors of Final GPA for the 1967 group, the Language Fluency Score was such for the

1968 group, the Total TOEFL Score for the 1969 group, and the Writing Ability TOEFL Subtest Score for the total group.

Women were found to have a significantly higher Mean GPA than were the men.

No significant differences were found in Mean GPA between the supervisors and administrators, and teachers.

The teachers of English group was found to obtain a significantly higher Mean GPA than was the group of teachers of subjects other than English.

Significant differences existed between the ranks of the Mean TOEFL Subtest Scores and the ranks of the Mean Affective Scores in Summer and Fall administrations for the 1969 group. The TOEFL Subtest Scores show that the most difficult subtest was Vocabulary, but by Felt Difficulty Scores, it was Listening Comprehension.

No significant differences existed between (1) the ranks of the Mean Felt Difficulty Scores and the ranks of the Mean Felt Time-Pressure Scores of Summer and Fall TOEFL Subtests, (2) the ranks of the Mean Felt Difficulty Scores between Summer and Fall TOEFL Subtests. The Listening Comprehension Subtest was felt to be the most difficult, and the English Structure, the least difficult.

The findings may provide useful information for those involved with selection, diagnosis and placement procedures for Thai students studying at The University of Alberta, and possibly other universities in North America.

ACKNOWLEDGEMENTS

The writer wishes to express her heartfelt gratitude to her supervisor, Dr. L. R. Gue, for his invaluable advice, immeasurable encouragement and patient guidance throughout the lengthy course of this study.

Gratitude is expressed to Dr. E. A. Holdaway, the member of the thesis committee, for his generous and skillful assistance in statistical design as well as for his continuous encouragements, all of which made this thesis a significant learning experience.

Appreciation is also expressed to Dr. V. R. Nyberg, the member of the thesis committee for his constructive criticism and interest in this study.

The financial support received from the Department of Educational Administration is gratefully acknowledged, and a special debt of gratitude is owing to Dr. G. L. Mowat for his timely encouragement and kind assistance without which this study would not have been possible.

Special thanks are extended to Professor S. R. Munro who provided valuable information for this study.

Sincere thanks are expressed to the Thai participants in the 1969 Thailand Comprehensive School Project, who willingly completed the questionnaire developed for this study.

TABLE OF CONTENTS

Chapter		Page
1.	INTRODUCTION	1
	Background to the Problem	1
	Need for the Study	4
	Purpose of the Study	4
	Statement of the Problem	5
	Research Hypotheses	6
	Delimitations	8
	Limitations	9
	Definition of Terms	10
2.	A SURVEY OF THE LITERATURE	11
	English Proficiency Scores and GPA	11
	Test of English as a Foreign Language (TOEFL)	13
	General Characteristics of TOEFL	13
	Statistical Characteristics of TOEFL	14
	Major Field of Study and Academic Achievement	20
	Sex and Academic Achievement	21
	Summary	23
3.	METHODOLOGY	25
	The Sample	25
	Selection Procedures in Thailand	26
	Characteristics of the Sample	27
	Instrumentation	31
	Collection of Data	34
	Compilation of Data	35
	Statistical Treatment	38
4.	FINDINGS	41
	Summer and Fall Total TOEFL Scores and GPA	41
	Conclusion for Hypothesis 1	43
	Summer and Fall TOEFL Subtest Scores and GPA	44
	Conclusion for Hypothesis 2	50
	Interview Panel Ratings and GPA	53
	Conclusion for Hypothesis 3	54

Chapter	Page
Interview Panel Ratings (1967) and TOEFL	54
Conclusion for Hypothesis 4	55
Interview Panel Ratings (1968) and TOEFL	55
Conclusion for Hypothesis 5	56
Predictors of GPA	56
Conclusion for Hypothesis 6	60
Sex and GPA	61
Conclusion for Hypothesis 7	62
Previous Positions and GPA	62
Conclusion for Hypothesis 8	63
Previous Background of English Teaching and GPA	63
Conclusion for Hypothesis 9	64
Affective Factors and TOEFL Scores for 1969 Group	64
Conclusion for Hypothesis 10	67
Mean Felt Difficulty and Mean Felt Time-Pressure Scores for Subtests of TOEFL for 1969 Group	68
Conclusion for Hypothesis 11	70
Mean Affective Scores of Summer and Fall TOEFL for 1969 Group	70
Conclusion for Hypothesis 12	72
Net Gain or Loss on Total TOEFL Scores Between Summer and Fall Administrations and GPA for 1969 Group	72
Discussion of Findings	74
5. SUMMARY, CONCLUSIONS AND IMPLICATIONS	79
Summary	79
The Problem	79
The Sample	79
Instruments	80
Data Collection	80
Results	80
Conclusions	82
Implications	83
Implications for The University of Alberta	83
Implications for Further Study	85
BIBLIOGRAPHY	86
APPENDIX A	91
APPENDIX B	94

Chapter	Page
APPENDIX C	96
APPENDIX D	98
APPENDIX E	100

LIST OF TABLES

Table	Page
1. Distribution of Participants by Their Sex, Previous Positions and Previous Background of English Teaching by Years and for Total Group	30
2. Correlation Coefficients between Summer Total TOEFL Scores and Grade Point Averages by Years and for the Total Group	42
3. Correlation Coefficients between Fall Total TOEFL Scores and Grade Point Averages by Years and for the Total Group	43
4. Correlation Coefficients between Summer TOEFL Subtest Scores and Grade Point Averages for 1967 Group (N=37)	45
5. Correlation Coefficients between Fall TOEFL Subtest Scores and Grade Point Averages for 1967 Group (N=37)	45
6. Correlation Coefficients between Summer TOEFL Subtest Scores and Grade Point Averages for 1968 Group (N=37)	47
7. Correlation Coefficients between Fall TOEFL Subtest Scores and Grade Point Averages for 1968 Group (N=37)	47
8. Correlation Coefficients between Summer TOEFL Subtest Scores and Grade Point Averages for 1969 Group (N=24)	49
9. Correlation Coefficients between Fall TOEFL Subtest Scores and Grade Point Average for 1969 Group (N=24)	49
10. Correlation Coefficients between Summer TOEFL Subtest Scores and Grade Point Averages for the Total Group (N=98)	51

11.	Correlation Coefficients between Fall TOEFL Subtest Scores and Grade Point Averages for the Total Group (N=98)	51
12.	Summary of All Significant Correlation Coefficients Found between Summer and Fall TOEFL Total and Subtest Scores and Grade Point Averages for 1967, 1968, 1969, and Total Groups	52
13.	Correlation Coefficients between Interview Panel Rating Scores and Grade Point Averages for 1968 Group (N=37)	53
14.	Correlation Coefficients between Interview Panel Rating Scores and Summer and Fall Total TOEFL Scores for 1967 Group (N=37). .	54
15.	Correlation Coefficients between Interview Panel Rating Scores and Summer Total TOEFL Scores for 1968 Group (N=37)	55
16.	Correlation Coefficients between Fall Total TOEFL Scores and Interview Panel Rating Scores for 1968 Group (N=37)	56
17.	Percentage of Final GPA Variance Accounted for by Selected Predictors for 1967 Group	58
18.	Percentage of Final GPA Variance Accounted for by Selected Predictors for 1968 Group	59
19.	Percentage of Final GPA Variance Accounted for by Selected Predictors for 1969 Group	59
20.	Percentage of Final GPA Variance Accounted for by Selected Predictors for Total Group	60
21.	Mean Grade Point Averages by Years between Men and Women	61
22.	Mean Grade Point Averages by Years between Supervisors and Administrators, and Teachers	62

Table		Page
23.	Mean Grade Point Averages by Years between Teachers of English and Teachers of Other Subjects	63
24.	Ranks of Mean TOEFL Scores and Mean Affective Scores of Summer and Fall TOEFL Subtests for 1969 Group	67
25.	Ranks of Mean Affective Scores of Summer and Fall TOEFL Test Experiences of the 1969 Group	69
26.	Mean Grade Point Averages by Years and Gain or Loss on Total TOEFL Scores between Summer and Fall Administrations . .	73

Chapter 1

INTRODUCTION

At present, Thailand is developing every aspect of the nation, particularly its economy. It is now in closer contact with the English-speaking countries than ever before. In terms of economic development, advanced Western knowledge and technology are of the utmost importance to the success of Thailand's present development. Not only are an increasing number of Thai students going abroad to study, but a large number of international agencies, for example, UNESCO, WHO, ILO, FAO, are operating in Thailand. Therefore English is increasingly playing an important function in the daily lives of Thais.

Background to the Problem

Although English is compulsory as a second language in Thailand schools, the Thai students still have communication problems in using the English language. Even at the university level, English is among the other critical subjects that needs to be strengthened in preparation for graduate programs. Nimmanhemenda (1968:17) indicates the important role of the English language in the universities in Thailand as follows:

. . . in view of the fact that a world language such

as English is essential as a tool for advanced studies and research as well as international scholarly communications, an intensive program in the English language becomes a necessity for graduate students involved.

In spite of the fact that their English proficiency is a serious problem in studying abroad, the number of Thai students who study abroad is increasing quite rapidly. The main reason is that the foreign degree holders are considered in Thailand to be superior to the holders of Thai degrees. This is pointed out by Shaw and Buasri (1964:39) :

Thailand is one of the few countries in the world that officially recognizes and rewards certain foreign degrees at a higher economic level than the holders of Thai degrees.

Kraft (1964:1) seems to clarify the above statement as he says:

Education is of great importance in Thai society today as leadership positions are often determined by the level of one's education. The ability of the educated elite to dominate is due in part to their superior knowledge but also because of the prestige attached to diploma and degrees.

The weakness of the graduate programs of studies and the quality of instruction makes the universities in Thailand unattractive and regarded as not of an equal standard to those abroad. An increasing number of high school graduates also wish to study abroad for the same reasons previously stated, and because their universities at home cannot admit them all.

The obvious causes of the weakness of the universities in Thailand are the shortage of qualified staff as

well as inadequate instructional resources. These problems are considered crucial, as Shaw and Buasri say (1964:39):

One of the problems in Thai higher education is that the professional resources do not seem to be adequate to reproduce themselves, let alone to make sufficient contributions to their own fields of specialization.

A possible way to solve such a problem of professional shortage is to have a training program for the staff abroad where there are sufficient resources both in personnel and instructional facilities. It is obvious that the English language plays a leading role in such a training program.

It is believed that without the problems in English, the Thai students will reach a high level of success in their study and in the long run the problems of shortage of resources will be solved. Thus, any attempts being made to increase English proficiency for the Thai students are worthwhile.

Fortunately, the training program at The University of Alberta, which was arranged for the Thai participants in the Thailand Comprehensive School Project, provided an opportunity to investigate a possible way to improve their study through their improvement of their English proficiency. The data from the English tests and grades from their study were available, to enable meaningful comparisons to be made.

Need for the Study

The English language is obviously among the most serious obstacles for most of the Thai students to study in English-speaking countries. Thai students are instructed mostly in English structure, and practice more in writing than in reading, while listening and speaking skills are neglected, and so they are not well prepared in studying abroad where discussion and participation techniques are more common. Although there have been a number of studies concerning the English language problems of foreign students, there have been very few studies which specifically concerned Thai students. Such specific study is needed so as to provide effective means of selection of the Thai participants to study abroad, a practical diagnosis of their English language problems and a proper placement of their English language programs. It is hoped that the study will be helpful both for success of the Thai participants and for student personnel practices of The University of Alberta. Furthermore, the Government of Thailand may be able to train more professional resources abroad with less time and cost.

Purpose of the Study

The purpose of the study was to investigate the relationship between English proficiency scores made on various evaluation instruments and final grade point averages of the Thai participants in the Thailand Compre-

hensive School Project at The University of Alberta. The attempt was made to find a possible means for a better selection, diagnosis and placement of Thai students who might come to study at The University of Alberta.

Statement of the Problem

The general research questions were:

1. Do significant relationships exist between the English proficiency scores on the English tests administered to the Thai participants in Thailand Comprehensive School Project and their Final Grade Point Averages at The University of Alberta?

2. Which variables are the best predictors of their Final Grade Point Averages?

More specifically, the study was designed to answer the following sub-questions:

1. What is the relationship between the Total Scores on the Summer and Fall TOEFL and the Final GPA for the 1967, 1968, 1969 and total groups?

2. What is the relationship between the Scores on Summer and Fall TOEFL Subtests and the Final GPA for the 1967, 1968, 1969 and total groups?

3. What is the relationship between the Scores of the Interview Panel Ratings and the Final GPA of the 1967 and the 1968 groups?

4. What is the relationship between Interview Panel Rating 1967, 1968 Scores and Summer and Fall TOEFL Scores?

5. What are the best predictors of Final GPA for the 1967, 1968, 1969 and total groups?

6. Do significant differences exist in Final GPA between:

(a) men and women

(b) supervisors/administrators, and teachers

(c) teachers of English and teachers of other subjects?

7. What is the difference between the ranks of the Mean TOEFL Subtest Scores and the ranks of the Mean Affective Scores towards the felt degree of difficulty of the Summer and Fall TOEFL Subtests for the 1969 group?

8. What is the relationship between net gain or loss on Total TOEFL Scores between Summer and Fall administrations and Grade Point Averages for 1969 group?

Research Hypotheses

From the above research questions, the following ten null hypotheses and two directional hypotheses were postulated.

1. No significant relationships existed between the Summer and Fall Total TOEFL Scores and the Final GPA for the 1967, 1968, 1969 and total groups.

2. No significant relationships existed between the Summer and Fall TOEFL Subtest Scores and the Final GPA for the 1967, 1968, 1969 and total groups.

3. No significant relationships existed between the Interview Panel Rating Scores and the Final GPA for

the 1967 and 1968 groups.

4. No significant relationships existed between the Interview Panel Rating 1967 Scores and the Summer and Fall Total TOEFL Scores.

5. No significant relationships existed between the Interview Panel Rating 1968 Subtest Scores--the Language Fluency Scores, the Potential for the Alberta Program Score--and the Summer and Fall TOEFL Scores.

6. English Proficiency Test Scores and their Subtest Scores were the best predictors of Final GPA for the 1967, 1968, 1969 and total groups.

7. No significant differences existed between the Mean Final GPA of men and women for the 1967, 1968, 1969 and total groups.

8. No significant differences existed between the Mean Final GPA of supervisors/administrators, and teachers for the 1967, 1968, 1969 and total groups.

9. The Mean Final GPA of teachers of English was significantly higher than the Mean Final GPA of teachers of other subjects for the 1967, 1968, 1969 and total groups.

10. No significant differences between the ranks of the Mean Affective Scores and the ranks of the Mean TOEFL Subtest Scores in Summer and Fall administrations for the 1969 group.

11. No significant differences existed between the ranks of the Mean Felt Difficulty Scores and the ranks of the Mean Felt Time-Pressure Scores of Summer and Fall TOEFL

Subtests for the 1969 group.

12. No significant differences existed between the ranks of the Mean Felt Difficulty Scores of Summer and Fall TOEFL Subtests for the 1969 group.

Delimitations

1. The sample of the present study was limited to the Thai participants in Thailand Comprehensive School Project in the 1967, 1968 and 1969 Diploma Program at The University of Alberta.

2. The present study attempted to investigate the Thai participants' success by considering their final grade point averages with respect to their English proficiency scores, sex, position assigned and major teaching area in Thailand.

3. The present study investigated only three categories of Thai participants. They were:

- (a) men and women
- (b) supervisors/administrators, and teachers
- (c) teachers of English and teachers of other subjects.

4. Non-standardized and standardized tests were used in this study. Prior to arrival in Alberta, the following language proficiency scores were obtained:

(a) The Interview Panel Ratings 1967 and 1968 administered in Thailand by a selection committee which consisted of the representatives from the Secondary Education Department in Thailand and from the Canadian consultants to the

Thailand Comprehensive School Project.

After arrival in Alberta, language proficiency score was obtained by

(b) The TOEFL Test distributed by Education Testing Service (ETS), administered by Dr. L. R. Gue, Training Director of the Comprehensive School Project at The University of Alberta. This test was required to be taken by all participants from 1967 onwards.

Limitations

1. The Interview Panel Ratings used as screening instruments in this study were extremely subjective. This kind of evaluation depended to a large extent on the selection committee's judgment and so it may yield a less reliable result than do the objective tests. Palmer (1965:236) says it "is inherently unreliable."

2. Differing composition of interview panels in 1967 and 1968 may have resulted in yielding distinctly different results in this study. The selection process including screening devices for measuring competence in English having been improved and the Interview Panels in 1968 having been more selective than those in the 1967.

3. Intervening variables in selection processes such as the desire of teachers to apply for studying abroad may make the sample not fully representative. Some of the teachers with less competence in English were asked to apply as their experiences and their potential for the Alberta Program were believed to be contributory to the

success of launching the Comprehensive School Project in Thailand.

4. Problems with 1969 Summer administration of TOEFL arose because the record which presented the Listening Comprehension part was faulty. The administrators of the Test had to read some of the questions instead. As a result the test conditions were not identical. However, aside from this, test conditions were rigorously identical.

Definition of Terms

TOEFL Test in this study refers to the ETS Test of English as a Foreign Language.

GPA refers to grade point average achieved by students on various courses at The University of Alberta on a 9-Point system.

Supervisors refers to participants whose previous position in Thailand, or major field of study overseas, or study at The University of Alberta, was the supervision of instruction at the secondary education level.

Administrators refers to participants whose previous position in Thailand, or major field of study in Thailand, or at The University of Alberta or overseas was Educational Administration.

English teachers refers to participants whose previous positions, or major or minor field of study in Thailand was English or Methods of Teaching English as a Second Language.

Chapter 2

A SURVEY OF THE LITERATURE

For foreign students whose native tongue is not English, their academic success in English-speaking countries depends to some extent on their English proficiency, no matter what fields of study they are in. This is especially the case when the term "academic success" is limited to "grades" they earn from their study abroad. Although there surely exists a relationship between the English proficiency of the foreign students and their final grades, the extent and the direction of the relationship will differ among the groups of foreign students categorized on the basis of their characteristics. Previous studies of this type should be taken into consideration.

ENGLISH PROFICIENCY SCORES AND GPA

In the study of validity in English proficiency tests, Spolsky (1967:40) indicates that general techniques had been used to attempt to find some correlation between English proficiency scores and "academic success." He further indicates that academic achievement had been normally defined as grade point average. With respect to

English language proficiency and academic achievement, grade point average was found to have most frequent use as a criterion measure of academic achievement (Mestenhauser 1961:47) .

A number of studies which attempted to determine the relationship between English proficiency as measured by objective language tests and academic achievement by grade point average, yielded different results. Upshur (1967:85) stated that "typically the correlations with English test scores are not great." Jones, Kaplan and Michael (1964:961-965) found that the degree of relationship between the scores made on various English proficiency tests by eighty foreign students at the University of Southern California and their grade point averages was not high. The correlation coefficients ranged from $-.02$ to $.20$. The predictive coefficients of the three most valid predictors of GPA were $.15$, $.20$ and $.20$. The researchers indicate that the low correlations "are attributable to both criterion measures and tests which are unreliable and invalid." Howell (1966), cited by Upshur (1967:85), has stated that

Studies based on student performance in the residual groups after selection or placement (according to the results of English tests) should not be expected to show high correlation between scores and grades.

As a result of Sugimoto's research (1966:124-125) he stated that "English examination scores are poor predictors of academic success." Mulligan (1966), cited by Burke

(1968:28), found that the relationship was "less significant than expected."

On the contrary, Mestenhauser (1961:47), in Research in Programs for Foreign Students: A Report of the Waldenwoods Seminar, states that these investigations:

. . . show a high correlation between high scores on objective language tests and satisfactory or better grade averages. They showed equally high correlation between low language test scores and academic failure.

A similar type of study conducted by Chelmers (1964) also yielded similar results. As reported by Educational Testing Service (1970:22), Chelmers, who administered TOEFL to a group of eighty-eight foreign students at the Massachusetts Institute of Technology, found that students with higher total scores on TOEFL are more likely to earn term ratings of 4.0 or higher than are students with lower TOEFL scores. The overall correlation between TOEFL scores and term ratings was .42.

These findings seem to indicate that studies of this type yielded different results, indicating that the validity and reliability of the tests used as well as some characteristics of a particular group of the students should be taken into consideration to a large extent.

TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL)

General Characteristics of TOEFL

TOEFL is commonly and widely used in the selection,

diagnosis and placement of the foreign students studying in colleges and universities in the United States as well as in the prediction of their academic success. Spolsky (1967:35) states that:

It has behind it the authority of the thirty or so organizations on whose initiative it was developed, and it now draws on the testing sophistication of the College Entrance Examination Board and Educational Testing Service. From February, 1964 to April, 1966, it was administered to 14,261 foreign students seeking admissions to college in the United States. During the academic year 1966-1967, it is estimated that there will be over 19,000 administrations of the tests at over 600 centers throughout the world.

Statistical Characteristics of TOEFL

In considering how effective an instrument it is and how well it agrees with other measures, the reliability and validity of the test must be taken into account.

Reliability of TOEFL. According to the College Entrance Examination Board (CEEB) and Educational Testing Service's (ETS) definition (1970:14), the reliability of a test is regarded as to the extent to which the test yields consistent or dependable results. It is measured and reported in terms of a correlation coefficient that expresses the degree to which individuals keep the same relative standing in a group when two equivalent forms of a test are administered to all members of the group.

A study was carried out by Educational Testing Service (1970:15), to investigate the reliability of the five subtests of TOEFL and the total TOEFL. The

reliabilities were indicated as follows: Listening Comprehension (.898), Vocabulary (.912), Reading Comprehension (.841), Writing Ability (.875) and Total (.969).

Concurrent validity of TOEFL. A study was carried out by Educational Testing Service in 1966 (1970:18) at New York University, where 166 applicants had taken both TOEFL and the American Language Institute (ALI) Test of Proficiency in English developed at New York University. Of these 166 students, 99 had also taken the Michigan Test of English Language Proficiency. The correlation of TOEFL total with Michigan total was .84 for the sample of 99. Correlations of .81 and .69 were found between TOEFL total and ALI total for the sample of 166 and 99 respectively. The correlation between TOEFL and ALI (NYU) Test was lower for the sample of 99 than for the sample of 166.

A number of comparative studies of TOEFL and other tests of English proficiency have been conducted. They seemed to yield high correlations as indicated by Spolsky (1967:38):

TOEFL has been shown to correlate highly with a test of English as a foreign language developed at the University of California at Berkeley, (.87). In further study, TOEFL was found to correlate with university ratings at four universities (correlations of .78, .87, .76, .79).

Dizney (1965:1129-1131), in his study attempting to determine the concurrent validity of the TOEFL for a group of twenty foreign students at Kent State University,

found that the correlation coefficient with the Michigan Test was .97 and with the ACT-English was .74.

Upshur (1966), reported by Educational Testing Service (1970:18), conducted a study to determine the correlation between TOEFL and the Michigan Test, and obtained a correlation of .89 for a total group of 100 students, while Cox found a correlation of .76 (Allen; 1971:2 unpublished paper).

A study of the relationship between a "cloze" test of English proficiency and TOEFL was carried out at the University of Colorado by Darnell (1968:39). A correlation of .86 was found between scores on this test and scores of TOEFL for a group of forty-eight students.

Validity of TOEFL. According to Darnell's definition (1970:39), one basis for determining the validity of a measuring instrument is to correlate the results of this instrument with other accepted measures of the variable under study. Another basis is to correlate the result of the measuring instrument with some external criterion which the instrument is expected to predict. Predictive validity as defined by Spolsky (1967:32) "involves relating the score to some later measure of performance. In the case of English tests for foreign students this criterion is usually grade point average."

A number of studies which attempted to determine the relationship between English proficiency test and grade point average was reported by Educational Testing

Service (1970:20-23). Most of these studies generally found that the results of English proficiency scores yielded low correlations. A study by Maxwell, conducted at the Berkeley campus of the University of California, also included an investigation of the comparative validity of TOEFL and the English proficiency test used at Berkeley. For the entire sample of 238 cases the validity of TOEFL with grade point averages was .17, the corresponding validity of Berkeley (UCB) tests was .11. Similar types of validity studies were carried out by the University of Washington (1966). For the entire group of 67 available cases, the Spearman rank-order correlation with grade point average was .26. An identical rank-order correlation coefficient was later found with another group of sixty-one cases at the University.

Domino (1966) at Fresno State College, reported by ETS (1970:22), conducted a study with a sample of fifty foreign students and reported the correlations of each of the five subtest scores and total TOEFL with GPA as follows: Listening Comprehension (.27), English Structure (.34), Vocabulary (.23), Reading Comprehension (.31), Writing Comprehension (.27) and Total (.31).

Spolsky (1967:40) summarized the results from a number of studies investigating a number of factors involved in the use of tests of English language as predictors of success of foreign students. The results were as follows: as a result of Clinton Chase's research

at Indiana University, he noted high correlation between the various tests that were used (TOEFL, Michigan and Pennsylvania State test). After trying various dimensions, he concluded that "the prospect is dim for relating scores on tests in English for foreign students with GPA. In no instances did the tests predict achievement in more than a casual way." Paul Holtzman, of Pennsylvania State University, determined after a number of studies that "we have learned that academic ability seems to be relatively independent of English language proficiency." A study of correlation between TOEFL and grade point average at the University of California at Berkeley reports that the test correlation was insignificant in the case of graduate students; graduate and undergraduate combined gave a correlation of .17 (barely significant). After a study of the various factors that might be taken into account in selecting foreign students, Sugimoto (1966:65), working at UCLA, concludes that "the least predictive value was attached to items such as scores on English Examinations."

Hwang and Dizney (1970:475-477) in their attempt to investigate the predictive validity of the Test of English as a Foreign Language as a predictor of first term grade point average and grades in English as a Second Language (ESL) for sixty-three Chinese graduate students who enrolled in the University of Oregon from Fall 1966 to 1968, found that the TOEFL was a relatively good predictor of grades in ESL. However its use to predict academic

success of Chinese graduate students was doubtful. The correlation coefficients between total TOEFL scores and GPA for male, female, Education, Social and Professional Service (SPS), Natural Science (NS), Social Science (SS), Architecture (ARCH) and Entire group with the sample of 32, 31, 21, 16, 11, 9, 6 and 63 were .17, .18, .21, .05, .22, -.32, .69, 19 respectively. None of these coefficients were significant at the .05 level. Means and standard deviations were reported, of 504 and 32.7 for men, of 505 and 42.5 for females, of 479 and 22.3 for Education group, of 505 and 38.8 for the entire group respectively.

From the preceeding review of empirical evidence, it can be concluded that English language proficiency is not the only factor involved in academic success.

Criticism of TOEFL. Plaister (1968:103) was critical of that portion of TOEFL which was designed to measure listening comprehension. Two features which he was not satisfied with were:

(1) the delivery of English on testing tapes was unlike the type of English the student was likely to encounter in the classroom situation. He stated that

If a person can understand that style of slowly, carefully articulated English, it still doesn't tell me very much about his ability to understand English as it is used in the normal classroom.

(2) the reading of the lecture: lectures were seldom read.

Another criticism towards the TOEFL made by Kaplan (1967:75) was as follows:

(1) There was some indication that the test may be monolithic. It is unlikely that language proficiency consists of a set of highly correlated skills. The correlations indicated that the English Structure, Vocabulary, Reading Comprehension and Writing Ability subtests may well be "tapping" the same variables. It appeared that the Listening Comprehension section "taps" some other variables.

(2) TOEFL measured only passive skills; that is, the candidate is not required to generate any structures.

(3) The greatest weakness of the test itself is that it does not permit the candidate to generate any grammatical structures and that it does not test the candidate's ability to generate phonology.

He further warned that

The absence of a subtest or tests to measure the candidate's ability to generate English forms, the monolithic quality of several subtests, and the presence of more speeding in the Reading Comprehension and Vocabulary subtests indicated that the results must be used with some care.

MAJOR FIELD OF STUDY AND ACADEMIC ACHIEVEMENT

There is some evidence to show that a relationship exists between field of study and academic achievement. Hountras (1957:311), in his study treating selected factors related to the academic difficulties experienced by some foreign graduate students at The University of Michigan, found that fields of study are important factors associated

with scholastic success. His study indicated that a proportionately greater number of students majoring in the social sciences and physical science incurred academic failure, whereas a proportionately smaller number of students majoring in the humanities experienced similar academic difficulties. He further stated that

The high incidence of probation in the social sciences may be attributed to the preponderance of verbal content in these fields which places foreign students with an initial language handicap at a disadvantage.

SEX AND ACADEMIC ACHIEVEMENT

In studies of U.S. students, which was controlled for sex of students, Juola (1960:637-641), Vick and Hornaday (1962:795-797 and Michael and Jones (1963:375-378), found that the predictability of success for girls was consistently better than that for boys. A study conducted by Juola (1960:637-641), attempting to determine the predictive power of the Scholastic Aptitude Test (SAT) to a group of 734 freshmen at Michigan State College found predictive coefficients of .62 for women and of .55 for men. In another study by Michael and Jones (1963:375-378), similar results were found for every sample over a period of five years. From the preceeding review of these studies, the finding was in agreement with Burke's (1968:18) statement that

U.S. women's grades are usually more predictable than men's. . . . As is generally found in studies of U.S. students the women's mean verbal scores were

slightly higher than the men's.

With respect to the predictive relationship between the sex of the foreign student and academic achievement, Burke (1968:18) held that "of the research that has been done, the findings differ. In one study (Howell, 1966) involving an international group of fifty-two men and sixty women, the grades of the women were less well predicted by their SAT scores than were those of the men." However, a study conducted by a Council of TOEFL, reported in CEEB and ETS booklet (1970:10), based on 113,975 foreign students with 82,687 men and 30,227 women and with 1,061 non-respondents seeking admission to colleges in the United States who took TOEFL from February 1964 through June 1969, showed that "women scored slightly higher than men." The result claimed by the Council of TOEFL "is consistent with findings elsewhere namely that women frequently do slightly better than men on verbal tests." Another study by Maxwell described by CEEB and ETS (1970:21), conducted at the Berkeley campus of the University of California, also included an investigation of the comparative validities of TOEFL and the English proficiency test used at Berkeley. The validity of TOEFL versus grade point average of .15 was found for men with the sample of 202, and of .33 for women with the sample of 36, and the corresponding validity of the Berkeley (UCB) test was of .12 for men and of .15 for women. The findings showed that women's grades were slightly more predictable than men's on both tests.

Although many studies generally found that women received better grades than men, Sugimoto (1966:91) at the University of California, Los Angeles (UCLA) and Hountras (1957:162) at the University of Michigan found no significant association between sex and achievement.

SUMMARY

The review of literature was centered around the relationship between the English language proficiency scores made by foreign students in various universities in the United States on objective English language proficiency tests in general and academic achievement. Special emphasis was placed by the Test of English as a Foreign Language (TOEFL) because the test played the leading role in this study as the evaluation instrument which yielded most of the English proficiency scores. A final concern was to investigate the relationship between certain demographic variables and academic achievement.

In the review of the literature related to demographic variables, a significant relationship was shown between fields of study and academic achievement. The findings related to the relationship of sex and academic achievement showed a lack of agreement. However there was substantial evidence that women scored slightly higher than men on verbal tests. Furthermore the women's grades were more predictable than men's on TOEFL.

In reviewing the literature concerning the

relationship between scores made on objective tests and academic achievement, the findings showed no agreement. A number of studies supported the view that there was a positive high correlation between the two variables.

Chapter 3

METHODOLOGY

In this chapter a description is given of the (a) selection and characteristics of the sample, (b) instrumentation, (c) collection of data and (d) compilation of data and statistical treatment.

The Sample

The total sample consisted of 98 Thai students of the Thailand Comprehensive School Project in a Diploma Program in Education, at The University of Alberta, Edmonton in 1967, 1968 and 1969. These students were selected from teachers, supervisors and principals of Comprehensive Schools in Thailand by a selection committee, composed of representatives from both the Secondary Education Department in Thailand and The University of Alberta.

Participants excluded from this study were those who had taken the TOEFL test but

- (a) had not completed the diploma program
- (b) had not taken either the Summer or the Fall administration of TOEFL
- (c) had missing information in their records which was needed for the purpose of this investigation

(d) had not answered the questionnaire concerning the feelings towards the TOEFL tests.

The 1967 group consisted of 37 Thai participants. One participant was not included because his record indicated that he did not complete his program due to illness.

The 1968 group consisted of 37 Thai participants. Three participants were excluded because of lack of information in the Summer or in the Fall administration of TOEFL.

The 1969 group consisted of 24 Thai participants. One was not included in this study because of lack of information concerning feelings towards the TOEFL test experiences.

Selection Procedures in Thailand

Prior to admission to The University of Alberta, the participants were selected in Thailand by the Selection Committee composed of the representatives from both the Secondary Education Department in Thailand and those from The University of Alberta. The criteria for selection were (a) the competence in English of the applicants; (b) the needs of the school in terms of the kinds of positions to be filled; and (c) the academic qualifications of the applicants.

To measure competence in English of the applicants, four tests of English were used in the following order:

1. Department of Secondary Education Tests.
2. Department of Technical and Economic Cooperation Test (DTEC Test).
3. British Council Tests.
4. Interview Panel Ratings.

The applicants were not allowed to take the next test unless they could pass the preceeding one. After the applicants had passed their English tests, their English scores were taken into consideration along with the needs of the schools, as well as their academic qualifications, to reach the final decision.

Characteristics of the Sample

Age. Among the five categories of age group, the greatest number of participants (73) occurred in the 25 to 35 age group. The second largest number of participants (20) occurred in the 36 to 45 age group. Of the 98 participants only one was under 25 years of age, one was 56 or over, and three were between 46 to 55 years.

Previous positions. According to the Thai participants' previous positions in Thailand as shown in the Appendix B, the largest group of the participants was formed by the 30 teachers of English. There were 16 supervisors, 25 teachers of Industrial Arts, Vocational Education and Business Education, 14 principals, and 13 teachers of Science. There were only 5 participants from

the Guidance and Counseling, 3 teachers of Thai, one teacher of French, and one teacher of Social Studies.

Major field of study. On the basis of their major fields of study in Thailand as shown in Appendix C, the largest group was formed by the 32 participants whose major subject was English. There were 19 participants who had specialized in Science, 16 in Industrial Arts, Vocational Education and Business Education, 14 in Mathematics, 9 in Thai and 4 in Social Studies.

Minor field of study. On the basis of their minor fields of study in Thailand as shown in Appendix D, the English and Mathematics groups were the largest groups. Each group was formed by 17 participants. There were 13 participants who had specialized in Thai, 11 in Social Science, 7 in Science, and each 6 in Guidance and Counseling and French. There were two participants from Library Science and only one from Industrial Arts, Vocational Education and Business Education.

Places of study overseas. As indicated in Appendix E, of the total group, twenty-four participants had studied overseas before coming to Canada. Out of the 24 participants, 19 of them had studied in the United States, 2 in New Zealand, 2 in the Philippines, and one in England. Of these 24, 11 were in the 1967 group, 10 were in the 1968 group, and 3 were in the 1969 group. According

to their records, the length of their stay overseas was not more than two years, except for a participant in the 1968 group whose length of stay overseas was seven years.

For the purpose of this study, all of the participants were categorized into three pairs of sub-groups based on their sex, previous positions in Thailand and their previous background of English teaching. On the basis of their previous positions, the participants were classified into administrator/supervisor, and teacher groups. In terms of their previous background of English teaching, the participants were categorized into two groups as teachers of English and teachers of other subjects. In this classification the participants' previous positions, places of study overseas, their major and minor fields of study were taken into consideration. Table 1 is the summary of Appendices A, B, C and D, showing the distribution of participants by their sex, previous positions and previous background of English teaching.

Sex. As indicated in Table 1, the sample of 98 participants contained 60 men and 38 women. There were 27 men and 10 women in the 1967 group, 20 men and 17 women in the 1968 group, and 13 men and 11 women in the 1969 group.

Previous positions. Of the 98 participants, 30 participants were supervisors or administrators, and 68 were teachers. Among the 30 supervisors and administrators,

14 participants were in the 1967 group, 12 were in the 1968 group and 4 were in the 1969 group. Among the 68 teachers, 23 teachers were in the 1967 group, 25 were in the 1968 group, and 20 were in the 1969 group.

Table 1

Distribution of Participants by Their Sex, Previous Positions and Previous Background of English Teaching by Years and for Total Group

Year of Program	Sex		Previous position		Previous background of English teaching	
	Male	Female	Supervisor/ administrator	Teacher	Eng. teacher	Non-Eng. teacher
1967/68	27	10	14	23	22	15
1968/69	20	17	12	25	27	10
1969/70	13	11	4	20	17	7
Total	60	38	30	68	66	32

Previous background of English teaching. Of the 98 participants, 66 participants were teachers of English, and 32 were teachers of other subjects. Among the 66 teachers of English, 22 participants were in the 1967 group, 27 were in the 1968 group, and 17 were in the 1969 group. Among the 32 teachers of other subjects, 15 participants were in the 1967 group, 10 were in the 1968 group, and 7 were in the 1969 group.

Instrumentation

Two types of instruments were used in this study. The first type was the three English proficiency tests and the second one was the questionnaire.

The three English proficiency tests were: (a) the Interview Panel Ratings (1967), (b) the Interview Panel Ratings (1968) and (c) TOEFL. The first two tests, classified as non-standardized tests, were used as screening instruments to help select the participants to study at The University of Alberta. The TOEFL, classified as a standardized test, was used to measure the English proficiency of the Thai participants before and after the Summer Language Program.

Since TOEFL was administered twice each year and the Interview Panel Ratings 1969 were not available, the instruments used in this study were as follows:

- (a) the Interview Panel Ratings 1967
- (b) the Interview Panel Ratings 1968
- (c) the Test of English as a Foreign Language TOEFL--Summer and Fall administrations
- (d) a questionnaire concerning affective aspects of the test.

The Interview Panel Ratings 1967. The test was administered in Thailand in 1967 by L. R. Gue and I. G. Dent of The University of Alberta, Comprehensive School project staff, and officers of the British Council

in Bangkok. The scores from this measure were rated in letter grades (A, B, C, D and E) by Gue and Dent. These grades were then transformed into percentages.

The Interview Panel Ratings 1968. The test was administered in Thailand in 1968 by L. R. Gue, Canadian advisors to the Comprehensive School Project, Officers of the British Council and Thai staff of the Comprehensive School Project. The maximum possible on this test was 120. The raw scores received by the participants were accumulated as raw scores and then were transformed into percentages. This instrument consisted of two subtests: (a) Verbal Language Fluency, and (b) Potential for the Alberta Program.

Test of English as a Foreign Language (TOEFL). This test was administered at The University of Alberta on July 8 and October 31 in 1967, June 28 and September 18 in 1968, and July 11 and October 16 in 1969 by L. R. Gue, Training Director of Thailand Comprehensive School Project.

According to a bulletin of information from Educational Testing Service, (1966:17a) TOEFL is designed to measure the English proficiency of foreign students, government trainees, and others who apply for or are assigned to education or training in countries where English is the common language. It is suitable for use at various levels ranging from secondary school to beyond graduate school. Responsibility for the program is held jointly by the College Entrance Examination Board (CEEB)

and Educational Testing Service (ETS) .

TOEFL is composed of five subtests having a total of 270 items. It requires three hours of actual testing time. It is entirely objective, and in working each problem the student selects the one answer from among four which he thinks is correct and marks his choice on an answer sheet which is returned to the United States for machine scoring.

The five sections of the TOEFL test are:

- (1) Listening Comprehension
- (2) English Structure
- (3) Vocabulary
- (4) Reading Comprehension
- (5) Writing Ability

Questionnaire. The questionnaire in this study was developed by the investigator and approved by L. R. Gue, the supervisor of the thesis. The questionnaire was designed to investigate the feelings scores towards the Summer and Fall administrations of TOEFL and the factors that affect the 1969 Thai participants' achievement.

The 1969 class participants were asked to rate on a five-point scale--Very Low, Low, Medium, High and Very High--by indicating:

- (a) the felt degree of readiness before the Summer and Fall TOEFL tests
- (b) the felt degree of difficulty of the whole and the

subtests of the two tests

- (c) the time pressure felt in completing the sections of the Summer and Fall TOEFL tests
- (d) the feeling of general health before taking the two tests
- (e) the degree of improvement in English between the Summer and Fall administrations of TOEFL.

Collection of Data

The data in this study were the scores from various English proficiency tests and the scores from the questionnaire, as outlined in the preceeding paragraphs, together with the Final Grade Point Averages which the participants earned at The University of Alberta. Three types of data were collected: Interview Panel Ratings scores (1967 and 1968) and the Summer TOEFL scores, used as predictor variables, along with the Final Grade Point Average (GPA) as a criterion measure.

The scores of English proficiency tests as well as the Final Grade Point Averages were obtained from the records of the Comprehensive School Project at The University of Alberta together with demographic information; age, sex, previous position in Thailand, number of years of study overseas, place of study overseas, major and minor field at The University of Alberta.

Collection of questionnaires. The questionnaires named "An Investigation of Feelings towards the Summer and

Fall TOEFL Test Experiences of the Thai Students in the Comprehensive School Project" were distributed to the 25 members of the 1969 class after they had finished the Fall TOEFL test. One participant was too busy to complete it, leaving a total sample of twenty-four participants completing the "Feelings towards the Summer and Fall TOEFL Test Experiences Instrument."

Compilation of Data

The data collected from the participants' records, the results of the two language screening instruments including the Summer and Fall administrations of TOEFL, the feelings scores, and the GPA were punched on IBM cards.

In preparing the data for analysis by the computer, the following modes of coding were employed for purposes of punching IBM cards and the following variables were held on each card.

<u>Variables</u>	<u>Code</u>
1. Name	TOEFL identification number
2. Sex	(1) Male (2) Female
3. Previous position in Thailand*	(1) Supervisor (2) Industrial Arts and Vocational Education Teachers (3) Guidance and Counseling (4) Principal (5) Social Studies Teacher (6) English Teacher and Librarian

*Categories represent only the actual data from the participants' records.

- | | | |
|---|-----|--|
| | (7) | French Teacher |
| | (8) | Thai Teacher (teaching Thai) |
| | (9) | Sciences and Mathematics Teachers |
| 4. Number of years study overseas* | (1) | One year |
| | (2) | Two years |
| | (7) | Seven years |
| 5. Place of study overseas* | (1) | United States |
| | (2) | New Zealand |
| | (3) | England |
| | (4) | Philippines |
| 6. (Number of years (study English (in school** | (1) | less than one year |
| | (2) | 1-2 years |
| | (3) | 2-3 years |
| | (4) | 3-4 years |
| 7. (Number of years (study English in (special insti- (tution** | (5) | 4+ (more than 4 years) |
| | | |
| 8. (Number of years (study English (by tutor** | | |
| | | |
| 9. (Number of years (study English (by self-study** | | |
| | | |
| 10. Age | | Student's age as of first TOEFL administration |
| 11. (Major field in (Thailand* | (1) | Supervision |
| | (2) | Industrial Arts, Vocational Education |
| 12. (Minor field in (Thailand* | (3) | Guidance and Counseling |
| | (4) | Administration |
| | (5) | Social Studies |
| 13. (Major field overseas | (6) | English |
| | (7) | French |
| | (8) | Thai |
| | (9) | Sciences |

*Categories represent only the actual data from the participants' records.

**Categories represent only the actual data from Educational Testing Service.

- | | | |
|---|---------|--|
| | (10) | Mathematics |
| | (11) | Secondary Education |
| | (12) | Library |
| | (13) | Aural Education |
| | (14) | Psychology |
| 14. Major field at The University of Alberta* | (1) | Supervision |
| | (2) | Industrial Arts, Vocational Education and Business Education |
| | (3) | Guidance and Counseling |
| | (4) | School Administration |
| | (12) | Library |
| | (15) | Academic Curriculum |
| 15. TOEFL Listening Comprehension (first administration) | TLC (1) | |
| 16. TOEFL English Structure (first administration) | TES (1) | |
| 17. TOEFL Vocabulary (first administration) | TV (1) | |
| 18. TOEFL Reading Comprehension (first administration) | TRC (1) | |
| 19. TOEFL Writing Ability (first administration) | TWA (1) | |
| 20. TOEFL Listening Comprehension (second administration) | TLC (2) | |
| 21. TOEFL English Structure (second administration) | TES (2) | |

*Categories represent only the actual data from the participants' records.

- | | | |
|-----|--|------------------------------|
| 22. | TOEFL Vocabulary
(second adminis-
tration) | TV (2) |
| 23. | TOEFL Reading
Comprehension
(second adminis-
tration) | TRC (2) |
| 24. | TOEFL Writing
Ability (second
administration) | TWA (2) |
| 25. | Grade Point
Average (9-point
Scale) | GPA |
| 26. | Interview Panel
Rating Scores
(1967) | Percentage |
| 27. | Interview Panel
Ratings (1968) | Language Fluency |
| 28. | Interview Panel
Ratings (1968) | Potential in Alberta Program |
| 29. | TOEFL Total
Scores (first
administration) | TTS (1) |
| 30. | TOEFL Total
Scores (second
administration) | TTS (2) |

Statistical Treatment

Pearson Product Moment Correlation. Correlation coefficients among the various test scores, and Final Grade Point Averages (GPA) were computed. The following correlations were calculated and arranged in tables.

1. The correlation coefficients between Summer and Fall Total TOEFL Scores, and Grade Point Averages by yearly groups and by total number of respondents.

2. The correlation coefficients between Summer and Fall TOEFL Subtest Scores and Grade Point Average by yearly groups and by total number of respondents.

3. The correlation coefficients between Interview Panel Rating Scores and Grade Point Average for the 1967 and 1968 groups.

4. The correlation coefficients between the Interview Panel Rating Scores and the Summer and Fall Total TOEFL Scores for the 1967 and 1968 groups.

Each correlation was tested for statistical significance at the .05 level.

Regression Analysis. Stepwise regression analysis was performed to investigate the ability of various Tests and Subtests to predict Grade Point Averages. These were computed for each group and the total group. The predictor variables for the 1967 group were

- (1) Interview Panel Ratings
- (2) Summer Total TOEFL Scores and
- (3) Summer TOEFL Subtest Scores.

For the 1968 group the predictor variables were

- (1) Interview Panel Ratings with the two Subtests
- (2) Summer Total TOEFL Scores
- (3) Summer TOEFL Subtest Scores.

For the 1969 group the predictor variables were

- (1) Summer Total TOEFL Scores
- (2) Summer TOEFL Subtest Scores.

t Test Analysis. t test analysis was used to investigate the differences in Final Grade Point Averages between

- (a) Men and Women
- (b) Supervisors/Administrators, and Teachers
- (c) English Teachers and Non-English Teachers.

Means. Means were computed for these continuous variables: GPA, TOEFL Total and Subtests of the two administrations, and Interview Panel Ratings both in 1967 and in 1968 by years and for the total group.

Spearman Rho Correlation. Spearman rho correlation coefficients were calculated to obtain the rank-order of the felt degree of difficulty of Summer and Fall TOEFL Subtests.

The level of probability accepted as significant was set at the 0.05 level (Ferguson, 1966:166).

Chapter 4

FINDINGS

This chapter presents findings concerning the relationships between the scores on the evaluation instruments, namely, Test of English as a Foreign Language, Interview Panel Ratings (for 1967 and 1968 groups only), and the Final Grade Point Averages. The investigation was concerned with both total scores and subtest scores for the 1967, 1968, 1969 and total groups. Ten null hypotheses and two directional hypotheses were tested by Pearson product moment correlations, regression analysis, and t tests and Spearman rho correlations.

SUMMER AND FALL TOTAL TOEFL SCORES AND GPA

Statement of Hypothesis 1

"No significant relationships exist between the Summer and Fall Total TOEFL Scores and the Final GPA for the 1967, 1968, 1969 and total groups."

Discussion of Results

Summer Total TOEFL Scores and GPA. Table 2 shows Pearson product moment correlation coefficients between the Summer Total TOEFL Scores and the Final GPA for the

1967, 1968, 1969 and total groups. Two of the three correlation coefficients between the Summer Total TOEFL Scores and the Final GPA achieved significance. For the 1968 group the correlation coefficient of .54 was significant at the .001 level, while for the 1969 group the correlation coefficient of .47 was significant at the .02 level. For the total group, the correlation coefficient of .64 was significant at the .001 level. No statistically significant correlation was found for the 1967 group, but the coefficient of 0.28 indicated a tendency towards a positive relationship.

Table 2

Correlation Coefficients between Summer Total TOEFL Scores and Grade Point Averages by Years and for the Total Group

Group	N	Mean Total TOEFL	Mean GPA	r	Probability
1967	37	426.22	6.4	0.28	0.088
1968	37	452.54	6.6	0.54	0.001
1969	24	431.33	6.9	0.47	0.020
Total	98	432.98	6.5	0.64	0.001

Fall Total TOEFL Scores and GPA. Table 3 shows Pearson product moment correlation coefficients between the Fall Total TOEFL Scores and the Final GPA for the 1967, 1968, 1969 and total groups. The correlation coefficients between the two variables, ranging from .42 to .75, were

all significant. Those for the 1968 group and for the total group were significant at the .001 level, while those for the 1967 and for the 1969 groups were significant at the .01 and .03 levels respectively.

Table 3

Correlation Coefficients between Fall Total TOEFL Scores and Grade Point Averages by Years and for the Total Group

Group	N	Mean Total TOEFL	Mean GPA	r	Probability
1967	37	446.38	6.4	0.42	0.010
1968	37	480.22	6.6	0.73	0.001
1969	24	458.75	6.9	0.45	0.026
Total	98	457.75	6.5	0.75	0.001

Conclusion for Hypothesis 1

The correlation coefficients for the Summer and Fall Total TOEFL Scores and the Final GPA were all significant, except for the 1967 Summer administration. The correlations ranged from .42 to .75. Hypothesis 1, was therefore rejected for the 1967, 1968, 1969 and total groups, but accepted for the 1967 group (Summer administration).

SUMMER AND FALL TOEFL SUBTEST SCORES AND GPA

Statement of Hypothesis 2

"No significant relationships exist between the Summer and Fall TOEFL Subtest Scores and the Final GPA for the 1967, 1968, 1969 and total groups."

Discussion of Results

Summer TOEFL Subtest Scores and GPA, 1967 group.

Table 4 shows Pearson product moment correlation coefficients between the Summer TOEFL Subtest Scores and the Final GPA for the 1967 group. Only one out of the five subtests of TOEFL was found to correlate significantly with the Final GPA. The correlation coefficient of .44 for the Writing Ability Score was significant at the .01 level, while those for the remaining Subtest Scores were lower, ranging from $-.01$ to $.26$. Among the four remaining Subtest Scores, only the coefficient for the Vocabulary Score showed a negative relationship, while the other three coefficients indicated a tendency towards a positive relationship.

Fall TOEFL Subtest Scores and GPA, 1967 group.

Table 5 shows Pearson product moment correlation coefficients between the Fall TOEFL Subtest Scores and the Final GPA for the 1967 group. Only three correlation coefficients were significant, of which two reached significance at the .01 level, and one at the .03 level.

Table 4

Correlation Coefficients between Summer TOEFL Subtest
Scores and Grade Point Averages for
1967 Group (N=37)

Subtest	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	43.49	6.4	0.14	0.416
English Structure	43.24	6.4	0.26	0.127
Vocabulary	40.68	6.4	-0.01	0.933
Reading Comprehension	42.97	6.4	0.21	0.224
Writing Ability	42.19	6.4	0.44	0.006

Table 5

Correlation Coefficients between Fall TOEFL Subtest
Scores and Grade Point Averages for
1967 Group (N=37)

Subtest	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	44.73	6.4	0.36	0.029
English Structure	47.19	6.4	0.45	0.006
Vocabulary	42.41	6.4	0.21	0.212
Reading Comprehension	43.38	6.4	0.25	0.137
Writing Ability	45.49	6.4	0.44	0.006

The two significant correlation coefficients at the .01 level were of .45 and .44 for the English Structure Score and the Writing Ability Score, and the significant correlation coefficient at the .03 level was .36 for the Listening Comprehension Score. No significant correlation coefficients were found for the Vocabulary and the Reading Comprehension Scores, but the coefficients of .21 and .25 respectively indicated a tendency towards a positive relationship.

Summer TOEFL Subtest Scores and GPA, 1968 Group.

Table 6 shows Pearson product moment correlation coefficients between the Summer TOEFL Subtest Scores and the Final GPA for the 1968 group. All correlation coefficients were significant between each of the Summer TOEFL Subtest Scores and the Final GPA. Two achieved significance at the .001 level, another two achieved at the .01 level, and one at the .02 level. The correlation coefficients ranged from .38 to .59.

Fall TOEFL Subtest Scores and GPA, 1968 Group.

Table 7 shows Pearson product moment correlation coefficients between the Fall TOEFL Subtest Scores and the Final GPA for the 1968 group. Significance was found at the .001 level for all correlation coefficients between each of the Fall TOEFL Subtest Scores and the Final GPA. The correlation coefficients ranged from .58 to .70.

Table 6

Correlation Coefficients between Summer TOEFL Subtest
Scores and Grade Point Averages for 1968 Group
(N=37)

Subtest	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	46.49	6.6	0.46	0.004
English Structure	47.73	6.6	0.55	0.001
Vocabulary	42.70	6.6	0.38	0.021
Reading Comprehension	44.51	6.6	0.48	0.002
Writing Ability	44.84	6.6	0.59	0.001

Table 7

Correlation Coefficients between Fall TOEFL Subtest
Scores and Grade Point Averages for 1968 Group
(N=37)

Subtest	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	52.41	6.6	0.70	0.001
English Structure	49.49	6.6	0.65	0.001
Vocabulary	46.05	6.6	0.58	0.001
Reading Comprehension	45.60	6.6	0.68	0.001
Writing Ability	46.57	6.6	0.67	0.001

Summer TOEFL Subtest Scores and GPA, 1969 Group.

Table 8 shows Pearson product moment correlation coefficients between the Summer TOEFL Subtest Scores and the Final GPA for the 1969 group. Only three of the coefficients of the Summer TOEFL Subtest Scores achieved significance at the .05 level. These were coefficients of .43, .41 and .35 for the English Structure, the Listening Comprehension and the Writing Ability Scores. Although the two remaining Subtest Scores, the Vocabulary and the Reading Comprehension Scores were not statistically significant, they indicated a tendency towards a positive relationship.

Fall TOEFL Subtest Scores and GPA, 1969 Group.

Table 9 shows Pearson product moment correlation coefficients between the Fall TOEFL Subtest Scores and the Final GPA for the 1969 group. Only three of the correlation coefficients achieved significance at the .05 level. The coefficients of .48 and .47 for the English Structure Score and for the Vocabulary Score were significant at the .02 level, and that of .44 for the Listening Comprehension Score was significant at the .03 level. Although the correlation coefficients for the Reading Comprehension and the Writing Ability Scores failed to achieve significance, they indicated a tendency towards a positive relationship.

Table 8

Correlation Coefficients between Summer TOEFL Subtest
Scores and Grade Point Averages for 1969 Group
(N=24)

Subtest	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	45.42	6.9	0.41	0.045
English Structure	47.46	6.9	0.43	0.034
Vocabulary	39.13	6.9	0.35	0.092
Reading Comprehension	40.38	6.9	0.30	0.153
Writing Ability	43.29	6.9	0.40	0.050

Table 9

Correlation Coefficients between Fall TOEFL Subtest
Scores and Grade Point Averages for 1969 Group
(N=24)

Subtest	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	45.46	6.9	0.44	0.030
English Structure	50.46	6.9	0.48	0.018
Vocabulary	42.67	6.9	0.47	0.021
Reading Comprehension	42.83	6.9	0.27	0.198
Writing Ability	47.96	6.9	0.25	0.231

Summer TOEFL Subtest Scores and GPA for the Total Group. As indicated in Table 10, significance was found for all correlation coefficients ranging from .45 to .66 between each of the Summer TOEFL Subtest Scores and the Final GPA at the .001 level for the group.

Fall TOEFL Subtest Scores and GPA for the Total Group. As indicated in Table 11, significance was found for all correlation coefficients ranging from .60 to .72 between each of the Fall TOEFL Subtest Scores and the Final GPA at the .001 level.

Conclusion for Hypothesis 2

Table 12 shows a summary of all significant correlations found between Summer and Fall TOEFL Total and Subtest Scores and GPA for 1967, 1968, 1969 and total groups. It was found that 30 out of 40 correlation coefficients between the Summer and Fall TOEFL Subtest Scores and the Final GPA for the 1967, 1968, 1969 and total groups, were significant. Out of 10 non-significant correlations, 4 appeared in the 1967 Summer administration, 2 in the 1967 Fall administration, 2 in the 1969 Summer administration and 2 in the 1969 Fall administration. Hypothesis 2 was therefore rejected for the 30 correlation coefficients, but accepted for the 10 remaining correlation coefficients.

Table 10

Correlation Coefficients between Summer TOEFL Subtest
Scores and Grade Point Averages for
the Total Group (N=98)

Subtests	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	44.62	6.5	0.58	0.001
English Structure	45.45	6.5	0.61	0.001
Vocabulary	40.68	6.5	0.45	0.001
Reading Comprehension	42.49	6.5	0.56	0.001
Writing Ability	43.04	6.5	0.66	0.001

Table 11

Correlation Coefficients between Fall TOEFL Subtest
Scores and Grade Point Averages for
the Total Group (N=98)

Subtests	Mean Scores	Mean GPA	r	Probability
Listening Comprehension	47.35	6.5	0.69	0.001
English Structure	48.32	6.5	0.72	0.001
Vocabulary	43.45	6.5	0.60	0.001
Reading Comprehension	43.72	6.5	0.69	0.001
Writing Ability	46.04	6.5	0.71	0.001

Table 12

Summary of All Significant Correlation Coefficients Found between Summer and Fall TOEFL Total and Subtest Scores and Grade Point Averages for 1967, 1968, 1969, and Total Groups

Year	1967		1968		1969		Total Group
No. of Participants	37		37		24		98
TOEFL Administration	Summer	Fall	Summer	Fall	Summer	Fall	Summer
Listening Comprehension	.14	.36 ^a	.46 ^b	.70 ^c	.41 ^a	.44 ^a	.58 ^c
English Structure	.26	.45 ^b	.55 ^c	.65 ^c	.43 ^a	.48 ^a	.61 ^c
Vocabulary	-.01	.21	.38 ^a	.58 ^c	.35	.47 ^a	.45 ^c
Reading Comprehension	.21	.25	.48 ^b	.68 ^c	.30	.27	.56 ^c
Writing Ability	.44 ^b	.44 ^b	.59 ^c	.67 ^c	.40 ^a	.25	.66 ^c
Total TOEFL Scores	.28	.42 ^b	.54 ^c	.73 ^c	.47 ^a	.45 ^a	.64 ^c

^aSignificant at the .05 level.

^bSignificant at the .01 level.

^cSignificant at the .001 level.

INTERVIEW PANEL RATINGS AND GPA

Statement of Hypothesis 3

"No significant relationships exist between the Interview Panel Rating Scores and the Final GPA for the 1967 and 1968 groups."

Discussion of ResultsInterview Panel Rating Scores and GPA, 1967 Group.

No statistically significant correlation was attained between the Interview Panel Rating 1967 Scores and the Final GPA. The coefficient was .10.

Interview Panel Rating Scores and GPA, 1968 Group.

As shown in Table 13, the Interview Panel Rating 1968 Subtest Scores were found to correlate significantly at the .001 level with the Final GPA. The coefficients of .63 and .60 were for the Language Fluency Score and the Potential for the Alberta Program Score respectively.

Table 13

Correlation Coefficients between Interview Panel
Rating Scores and Grade Point Averages for
1968 Group (N=37)

Subtest	Mean Scores	Mean GPA	r	Probability
Language Fluency	61.05	6.6	0.63	0.001
Potential for the Alberta Program	65.19	6.6	0.60	0.001

Conclusion for Hypothesis 3

Hypothesis 3 was accepted for the Interview Panel Rating 1967 Score but rejected for the Interview Panel Rating 1968 Score.

INTERVIEW PANEL RATINGS (1967) AND TOEFL

Statement of Hypothesis 4

"No significant relationships exist between the Interview Panel Rating 1967 Scores and the Summer and Fall Total TOEFL Scores."

Discussion of Results

As indicated in Table 14, the Interview Panel Rating 1967 Scores correlated significantly at the .001 level with both the Summer and Fall Total TOEFL Scores. The coefficients of .63 and .58 were obtained respectively.

Table 14

Correlation Coefficients between Interview Panel Rating Scores and Summer and Fall Total TOEFL Scores for 1967 Group (N=37)

Administration	Mean Interview	Mean TOEFL	r	Probability
Summer	70.65	426.22	0.63	0.001
Fall	70.65	446.38	0.58	0.001

Conclusion for Hypothesis 4

Hypothesis 4 was rejected.

INTERVIEW PANEL RATINGS (1968) AND TOEFL

Statement of Hypothesis 5

"No significant relationships exist between the Interview Panel Rating 1968 Subtest Scores--the Language Fluency Scores, the Potential for the Alberta Program Scores--and the Summer and Fall Total TOEFL Scores."

Discussion of Results

As indicated in Table 15 and Table 16, the Language Fluency and the Potential for the Alberta Program Scores were correlated significantly at the .001 level with the Summer and Fall Total TOEFL Scores. The coefficients ranged from .61 to .77.

Table 15

Correlation Coefficients between Interview Panel
Rating Scores and Summer Total TOEFL
Scores for 1968 Group (N=37)

Subtest	Mean Interview	Mean TOEFL	r	Probability
Language Fluency	61.05	452.54	0.71	0.001
Potential for the Alberta Program	65.19	452.54	0.61	0.001

Conclusion for Hypothesis 5

Hypothesis 5 was rejected.

Table 16

Correlation Coefficients between Mean Interview
Panel Rating Scores and Fall Mean Total
TOEFL Scores of 1968 Group (N=37)

Subtest	Mean Interview	Mean TOEFL	r	Probability
Language Fluency	61.05	480.22	0.77	0.000
Potential for the Alberta Program	65.19	480.22	0.69	0.000

PREDICTORS OF GPA

This section presents the predictors of the Final GPA for the 1967, 1968, 1969 and total groups by using Stepwise regression analysis which gave the best predictors available for each group considered.

Statement of Hypothesis 6

"English Proficiency Test Scores and their Subtest Scores are the best predictors of Final GPA for the 1967, 1968, 1969 and total groups."

Discussion of Results

Predictors of GPA for 1967 Group. Predictor Variables for this group were as follows:

1. Summer TOEFL Listening Comprehension--TLC (1)
2. Summer TOEFL English Structure--TES (1)

3. Summer TOEFL Vocabulary--TV (1)
4. Summer TOEFL Reading Comprehension--TRC (1)
5. Summer TOEFL Writing Ability--TWA (1)
6. Summer Total TOEFL--TTS (1)
7. Interview Panel Ratings 1967--INT

The criterion measure was the Final Grade Point Averages.

Table 17 shows percentages of Final GPA variance accounted for by selected predictors for the 1967 group. The best single predictor of Final GPA for this group was the Summer TOEFL Writing Ability Score, accounting for 20.47 percent of criterion variance. This was significant at the .01 level. Addition of the Summer TOEFL Vocabulary score accounted for 37.17 percent of the variance, also significant at the .01 level. Addition of other variables as predictors did not add significantly to prediction of the variance in Final GPA.

Predictors of GPA for 1968 Group. The predictor variables for this group were the Summer TOEFL Total and Subtest Scores, and the Interview Panel Rating 1968 Subtest Scores: Language Fluency (LF) and Potential for the Alberta Program (PAP).

Table 18 shows percentages of Final GPA variance accounted for by selected predictors for the 1968 group. The best single predictor of Final GPA for this group was the Language Fluency Score, accounting for 41.52 percent of the variance, with significance at the .001

level. Addition of other variables as predictors did not add significantly to prediction of the variance in Final GPA.

Table 17

Percentage of Final GPA Variance Accounted for
by Selected Predictors for 1967 Group

Step	Variables	Name of Predictors	Cumulative % variance accounted for	Probability level
1	5	TWA (1)	20.47	.005
2	3	TV (1)	37.17	.005
3	7	TTS (1)	40.22	.204
4	6	INT (1)	40.98	.527
5	4	TRC (1)	41.08	.821
6	2	TES (1)	41.28	.748
7	1	TLC (1)	41.50	.744

Predictors of GPA for 1969 Group. The predictor variables for this group were the Summer TOEFL Total and Subtest Scores.

Table 19 shows percentages of Final GPA variance accounted for by selected predictors for the 1969 group. The best single predictor of Final GPA for this group was the Summer Total TOEFL Score, accounting for 24.28 percent of the variance, with significance at the .01 level. Addition of other variables as predictors did not add significantly to prediction of the variance in Final GPA.

Table 18

Percentage of Final GPA Variance Accounted for
by Selected Predictors for 1968 Group

Step	Variables	Name of Predictors	Cummulative % variance accounted for	Probability level
1	6	LF	41.52	.001
2	5	TWA (1)	44.13	.216
3	4	TRC (1)	44.90	.500
4	3	TV (1)	46.73	.303
5	7	PAP	47.52	.501
6	8	TTS (1)	47.56	.874
7	2	TES (1)	47.56	.991

Table 19

Percentage of Final GPA Variance Accounted for
by Selected Predictors for 1969 Group

Step	Variables	Name of Predictors	Cummulative % variance accounted for	Probability level
1	6	TTS (1)	24.28	.014
2	4	TRC (1)	24.34	.590
3	1	TLC (1)	27.06	.499
4	2	TES (1)	28.55	.549
5	3	TV (1)	29.08	.717
6	5	TWA (1)	29.08	.100

Predictors of GPA for Total Group. The predictor variables were the Summer TOEFL Total and Subtest Scores.

Table 20 shows percentages of Final GPA variance accounted for by selected predictors for the total group. The best single predictor of Final GPA was the Summer TOEFL Writing Ability Score, accounting for 28.61 percent of the variance, with significance at the .01 level. Addition of other variables as predictors did not add significantly to prediction of the variance in Final GPA.

Table 20

Percentage of Final GPA Variance Accounted for
by Selected Predictors for Total Group

Step	Variables	Name of Predictors	Cummulative % variance accounted for	Probability level
1	5	TWA (1)	28.61	.001
2	3	TV (1)	31.29	.057
3	1	TLC (1)	33.86	.059
4	6	TTS (1)	35.31	.152
5	4	TRC (1)	36.74	.152
6	2	TES (1)	37.37	.346

Conclusion for Hypothesis 6

Hypothesis 6, was therefore accepted for the Summer TOEFL Writing Ability 1967, the Language Fluency (1968), the Summer Total TOEFL 1969 Scores and the Summer TOEFL Writing

Ability Score for total group, but rejected for other predictor variables.

SEX AND GPA

Statement of Hypothesis 7

"No significant differences exist between the Mean Final GPA of men and women for the 1967, 1968, 1969 and total groups."

Discussion of Results

Table 21 shows the Mean Grade Point Averages of men and women for the 1967, 1968, 1969 and total groups. The value of t reached the designated level of probability only for the total group. None of the values of t for the 1967, 1968 and 1969 groups reached the designated level of probability, but the Mean GPA of women was higher than that of men in every group.

Table 21

Mean Grade Point Averages by Years
between Men and Women

Year	Men		Women		t	Level of Probability
	N	Mean GPA	N	Mean GPA		
1967	27	6.274	10	6.580	1.430	0.162
1968	10	6.355	17	6.929	1.481	0.148
1969	13	6.854	11	6.973	1.483	0.634
Total	60	6.427	38	6.850	2.356	0.021

Conclusion for Hypothesis 7

Hypothesis 7, was therefore rejected for the total group but accepted for the 1967, 1968 and 1969 groups.

PREVIOUS POSITIONS AND GPA

Statement of Hypothesis 8

"No significant differences exist between the Mean Final GPA of supervisors/administrators, and teachers for the 1967, 1968, 1969 and total groups."

Discussion of Results

As indicated in Table 22, none of the values of $\underline{t}$ reached the designated level of probability for the 1967, 1968, 1969 and total groups.

Table 22

Mean Grade Point Averages by Years between Supervisors and Administrators, and Teachers

Year	Supervisors and Administrators	Mean Teachers GPA	Mean GPA	<u>t</u>	Level of Probability	
1967	14	6.321	23	6.378	0.282	0.779
1968	12	7.092	25	6.392	1.711	0.096
1969	4	7.275	20	6.835	1.388	0.179
Total	60	6.757	68	6.518	1.233	0.220

Conclusion for Hypothesis 8

Hypothesis 8 was therefore accepted.

PREVIOUS BACKGROUND OF ENGLISH TEACHING AND GPA

Statement of Hypothesis 9

"The Mean Final GPA of teachers of English is significantly higher than the Mean Final GPA of teachers of other subjects for the 1967, 1968, 1969 and total groups."

Discussion of Results

Table 23 shows the Mean Grade Point Averages of teachers of English and teachers of other subjects for the 1967, 1968, 1969 and total groups. The value of t reached the designated level of probability for the 1968 group. When the total group was considered the value of t also achieved significance.

Table 23

Mean Grade Point Averages by Years between Teachers
of English and Teachers of Other Subjects

Year	English Teachers	Mean GPA	Non-English Teachers	Mean GPA	t	Level of Probability
1967	22	6.464	15	6.200	1.359	0.183
1968	27	6.933	10	5.770	2.885	0.007
1969	17	7.012	7	6.657	1.136	0.187
Total	66	6.797	32	6.166	3.490	0.001

Conclusion for Hypothesis 9

Hypothesis 9 was therefore accepted for the 1968 and total groups but rejected for the 1967 and 1969 groups.

AFFECTIVE FACTORS AND TOEFL SCORES FOR 1969 GROUP

This section presents the comparison of the degree of difficulty of subtests in Summer and Fall administrations of TOEFL as determined from the Mean TOEFL Subtest Scores and the Mean Affective Scores for the 1969 group. The purpose was to identify strengths and weaknesses of participants towards each subtest of the TOEFL and to investigate the relationship between TOEFL Scores and Affective Scores. The Affective Scores were derived from the questionnaire concerning feelings towards the Summer and Fall TOEFL test experiences by the Thai participants who were asked to indicate their feelings on five-point scale.

Statement of Hypothesis 10

"No significant differences exist between the ranks of the Mean TOEFL Subtest Scores and the ranks of the Mean Affective Scores in Summer and Fall administrations for the 1969 group."

Discussion of Results

For the purpose of the investigation of this

section, the Mean TOEFL Subtest Scores and the Mean Affective Score in Table 24 were ranked on the following bases: (1) the Mean TOEFL Subtest Scores were ranked on the basis that the lower score implied the higher degree of difficulty for the participants and so the rank number was high and (2) the Mean Affective Scores were ranked on the basis that the higher the degree of difficulty, the higher the rank number would be.

The Spearman rho correlation coefficients between the ranks of the Summer Mean TOEFL Subtest Score and the reverse ranks of the Summer Mean Felt Difficulty Score was 0.3. This was not statistically significant, indicating a significant difference between the ranks of the Mean Performance on each Summer TOEFL Subtest and the reverse ranks of the Mean Felt Difficulty of each TOEFL Subtest. The same value of 0.3 of the Spearman rho correlation coefficient between the ranks of the Fall Mean TOEFL Subtest Score and the reverse ranks of the Fall Mean Felt Difficulty Score was obtained, indicating a significant difference between the ranks of the Mean Performance on each Fall TOEFL Subtest and the reverse ranks of the Mean Felt Difficulty of each TOEFL Subtest.

This means that the relative positions of mean scores for each subtest did not remain constant for the two test administrations.

For interest, the Spearman rho coefficient between the ranks of the Summer Mean TOEFL Subtest Score and the

ranks of the Fall Mean TOEFL Subtest Score was 0.9. This was statistically significant at the .05 level, indicating significant similarity between the ranks of the Mean Performance on each Summer TOEFL Subtest and the ranks of the Mean Performance on each Fall TOEFL Subtest. The same value of 0.9 of the Spearman rho correlation coefficient between the ranks of the Summer Mean Felt Difficulty Score and the ranks of the Fall Mean Felt Difficulty Score was obtained. This was statistically significant at the .05 level, also indicating similarity between the ranks of the Mean Felt Difficulty Score on each Summer TOEFL Subtest and the ranks of the Mean Felt Difficulty Score on each Fall Subtest. This indicates that the relative positions of scores for each subtest remained constant for the two test administrations.

Considering the ranks in Table 24, it was found that the English Structure was ranked the lowest in both the Mean TOEFL Subtest Scores and the Mean Felt Difficulty Scores in both administrations. It means that the English Structure showed the highest Mean TOEFL Subtest Scores and it was felt to be the least difficult.

On the contrary, in both administrations, the Vocabulary yielded the lowest Mean TOEFL Subtest Scores and thus it was ranked highest while the Listening Comprehension yielded the highest Mean Felt Difficulty Scores and it was ranked lowest, indicating that Vocabulary was the most difficult subtest of TOEFL while Listening Comprehension was

felt to be the most difficult one.

Conclusion for Hypothesis 10

Because significant differences were obtained between the order of the ranks of the Mean of TOEFL Subtests and the reverse ranks of the Mean of the Felt Difficulty Scale, Hypothesis 10 was rejected.

Table 24

Ranks of Mean TOEFL Scores and Mean Affective Scores
of Summer and Fall TOEFL Subtests for 1969 Group

Subtest	Mean TOEFL Subtest Score				Mean Felt Difficulty Score			
	Summer Rank		Fall Rank		Summer Reverse Rank		Fall Reverse Rank	
	1		2		3		4	
Listening Comprehension	45.42	2	45.46	3	4.21	5	3.54	5
English Structure	47.46	1	50.46	1	2.79	1	2.79	1
Vocabulary	39.13	5	42.67	5	3.42	3	3.04	2
Reading Comprehension	40.38	4	42.83	4	3.71	4	3.46	4
Writing Ability	40.39	3	47.96	2	2.17	2	3.17	3

Spearman Rho Correlation Coefficients

		<u>Subtests</u>		
		2	3	4
1.	Mean Summer TOEFL Subtest Scores	0.9	0.3	n/a
2.	Mean Fall TOEFL Subtest Scores		n/a	0.3
3.	Mean Summer Felt Difficulty Scores			0.9

MEAN FELT DIFFICULTY AND MEAN FELT
TIME-PRESSURE SCORES FOR SUBTESTS
OF TOEFL FOR 1969 GROUP

Statement of Hypothesis 11

"No significant differences exist between the ranks of the Mean Felt Difficulty Score and the ranks of the Mean Felt Time-Pressure Score of Summer and Fall TOEFL Subtests for the 1969 group."

Discussion of Results

Table 25 shows ranks of the Mean Affective Scores of Summer and Fall TOEFL Test Experiences of the 1969 group. The Spearman rho correlation coefficient between the ranks of the Summer Mean Felt Difficulty Score and the ranks of the Summer Mean Felt Time-Pressure Score was 0.9. This was significant at the 0.05 level, indicating congruence between the ranks of the Mean Felt Difficulty of each Summer TOEFL Subtest and the ranks of the Mean Felt Time-Pressure of each Summer TOEFL Subtest.

The Spearman rho correlation coefficients between the ranks of the Fall Mean Felt Difficulty Score and the ranks of the Fall Mean Felt Time-Pressure Score was 1.0. This was significant at the 0.01 level, indicating no significant difference between the ranks of the Mean Felt Difficulty of each Fall TOEFL Subtest and the ranks of the Mean Felt Time-Pressure of each Fall TOEFL Subtest.

Table 25

Ranks of Mean Affective Scores of Summer and Fall
TOEFL Test Experiences of the 1969 Group

Subtest	Mean Felt Difficulty Subtest Score				Mean Felt Time- Pressure Subtest Score			
	Summer	Rank 1	Fall	Rank 2	Summer	Rank 3	Fall	Rank 4
Listening Comprehension	4.21	5	3.54	5	3.92	5	3.42	5
English Structure	2.79	1	2.79	1	3.33	2	3.00	1
Vocabulary	3.42	3	3.04	2	2.28	3	3.13	2
Reading Comprehension	3.71	4	3.46	4	3.75	4	3.42	4
Writing Ability	3.17	2	3.17	3	3.25	1	3.17	3

Spearman Rho Correlation Coefficients

	<u>Subtests</u>		
	2	3	4
1. Mean Summer Felt Difficulty Subtest Scores	0.9	0.9	n/a
2. Mean Fall Felt Difficulty Subtest Scores		n/a	1.0
3. Mean Summer Felt Time-Pressure Subtest Scores			0.7

For interest, the Spearman rho correlation coefficient between the ranks of the Summer Mean Felt Time-Pressure Subtest Score and the ranks of the Fall Mean Felt Time-Pressure Subtest Score was 0.7. This was not statistically significant, indicating no significant difference between the ranks of the Mean Felt Time-Pressure of each Summer TOEFL Subtest and the ranks of the Mean Felt Time-Pressure of each Fall TOEFL Subtest.

Conclusion for Hypothesis 11

Hypothesis 11, was therefore generally accepted. The findings supported the evidence that the Summer and Fall Listening Comprehension were felt to be the most difficult Subtests of TOEFL. This was followed by the Summer and Fall Reading Comprehension. The Summer and Fall English Structure were felt to be the least difficult ones.

MEAN AFFECTIVE SCORES OF SUMMER AND FALL TOEFL FOR 1969 GROUP

Statement of Hypothesis 12

"No significant differences exist between the ranks of the Mean Felt Difficulty Scores of Summer and Fall TOEFL Subtests for the 1969 group."

Discussion of Results

As indicated in Table 25, the Spearman rho correlation coefficient between the ranks of the Summer Mean

Felt Difficulty Score and the ranks of the Fall Mean Felt Difficulty Score was 0.9. This was significant at the 0.05 level, indicating significant similarity between the ranks of the Mean Felt Difficulty of each Summer TOEFL Subtest and the ranks of the Mean Felt Difficulty of each Fall TOEFL Subtest.

In comparison of the degree of difficulty of the Summer and Fall TOEFL Tests, the felt degree of difficulty of the whole Summer and Fall TOEFL Tests, the felt degree of readiness before the Summer and Fall administrations, the feeling of general health before the Summer and Fall TOEFL Tests, and the degree of improvement in English in the Fall administration of TOEFL, were shown in the Table below.

Subtest	Mean Felt Difficulty Score	
	Summer	Fall
Whole	3.96	3.5
Readiness	2.67	3.13
General Health	3.54	3.38
Improvement		3.21

As indicated in Table 25, both the Mean Scores of TOEFL Subtests and the Mean Scores of the Whole TOEFL Test were lower in the Fall administration than in the Summer administration. Only two exceptions were found in the Mean English Structure Scores and the Mean Writing Ability

Scores, as they were equal in both administrations. Furthermore, the Mean of the Whole Fall TOEFL Test Score (3.50) was lower than the Mean of the Whole Summer TOEFL Test Score (3.96). It seems to indicate that the Fall TOEFL Test was felt to be slightly less difficult than the Summer Test. It was found that the Mean Readiness Before the Fall TOEFL Test Score (3.13) was higher than the Mean Readiness Before the Summer TOEFL Test Score (2.67), indicating that the participants felt that they were more ready to take the Fall TOEFL Test than the Summer TOEFL Test. In addition the Mean Score of General Health Before the Fall TOEFL Test (3.38) was lower than the Mean Score of General Health Before the Summer TOEFL Test (3.54), indicating that the participants' feeling of general health was better in the Fall than in the Summer. The felt degree of improvement in English between the Summer and Fall administrations of the Thai participants in 1969 group was 3.21.

Conclusion for Hypothesis 12

Hypothesis 12 was generally accepted.

NET GAIN OR LOSS ON TOTAL TOEFL SCORES
BETWEEN SUMMER AND FALL
ADMINISTRATIONS AND
GPA FOR 1969 GROUP

It was assumed that students who had high proficiency in English on arrival in Canada would have less change to improve scores from the Summer Language

Program than those with low proficiency in English. It was also assumed that for those who had as high English proficiency as native speakers of English the Summer Language Program would have less effect on their Grade Point Averages.

Table 26 shows that the participants with gain in TOEFL scores between Summer and Fall administrations were 30 out of 37 in the 1967 group, 33 out of 37 in the 1968 group and 22 out of 25 in the 1969 group, indicating that the participants had so low English proficiency that they have much more chance to gain.

Table 26

Mean Grade Point Averages by Years and Gain or Loss on Total TOEFL Scores between Summer and Fall Administrations

Group	No. with loss	Mean GPA of those with loss	No. with gain	Mean GPA of those with gain
1967	7	6.3	30	6.4
1968	4	4.3	33	6.8
1969	3	6.3	22	7.5
Total	14	5.7	85	6.6

The findings also show that those with gain in TOEFL Scores earned higher Grade Point Averages than those with loss in TOEFL Scores.

An implication can be drawn from these findings

that the relationship between the TOEFL scores and the Final GPA existed in such a way that the Thai participants who have higher Final Total TOEFL Scores can be expected to earn higher Grade Point Averages.

The possibility of errors of measurement cannot be ignored, however, in accounting for the loss in TOEFL scores by some participants in the second administration of TOEFL.

As the number of the participants with gain in TOEFL Scores was much more than those with loss, it is indicated that the Summer Language Program served the needs of the Thai participants.

DISCUSSION OF FINDINGS

Hypothesis 1, that no significant relationships existed between the Summer and Fall Total TOEFL Scores and the Final GPA for the 1967, 1968, 1969 and total groups, was rejected for the 7 out of 8 correlation coefficients, indicating a significant positive relationship between the Total TOEFL Scores and the Final GPA for Thai participants of Thailand Comprehensive School Project in Diploma Program at The University of Alberta as a whole. It indicates a tendency that participants with high Total Scores on TOEFL were more likely to earn a high GPA while those with low Total Scores on TOEFL were more likely to earn a low GPA.

Hypothesis 2, that no significant relationships existed between the Summer and Fall TOEFL Subtest Scores and the Final GPA for the 1967, 1968, 1969 and total groups, was

rejected for the 30 out of 40 correlation coefficients, indicating a significant positive relationship between the Summer and Fall TOEFL Subtest Scores and the Final GPA for the participants as a whole. It indicates a tendency that participants with high TOEFL Subtest Scores were more likely to earn a high GPA while those with low TOEFL Subtest Scores were more likely to earn a low GPA.

Hypothesis 3, that no significant relationships existed between the Interview Panel Rating Scores and the Final GPA for the 1967 and 1968 groups, was rejected for the 1968 group. A significant positive relationship existed between the Interview Panel Rating 1968 Scores and the Final GPA. It indicates a tendency that participants with high Interview Panel Rating (1968) Scores were more likely to earn a high GPA while those with low Interview Panel Rating (1968) Scores were more likely to earn a low GPA.

Hypothesis 4, that no significant relationships existed between the Interview Panel Rating (1967) Scores, and the Summer and Fall Total TOEFL Scores, was rejected. A significant positive relationship existed, indicating that participants with high Interview Panel Rating (1967) Scores were more likely to get high Total Scores on Summer and Fall TOEFL administrations.

Hypothesis 5, that no significant relationships existed between the Interview Panel Rating (1968) Subtest Scores: the Language Fluency Scores and the Potential for the Alberta Program Scores, and the Summer and Fall Total

TOEFL Scores, was rejected; indicating a significant positive relationship between the Interview Panel Rating (1968) scores, and the Summer and Fall Total TOEFL Scores. Participants with high Interview Panel Rating (1968) Scores were more likely to get high Total Scores on Summer and Fall TOEFL administrations.

Hypothesis 6, that English Proficiency Test Scores and their Subtest Scores were the best predictors of Final GPA for the 1967, 1968, 1969 and total groups, was accepted. The Summer Writing Ability Score and the Summer Vocabulary Score were the best predictors of Final GPA for the 1967 group while the Language Fluency Score was such for the 1968 group. The Summer Total TOEFL Score was the best single predictor of GPA for the 1969 group while the Writing Ability Score was such for the total group. It can be stated that the Summer Writing Ability Score was the best single predictor of Final GPA for the Thai participants as a whole. This might be because the Thai participants had higher ability in writing ability than any other skills and their ability was related to the evaluation system in The University of Alberta. Most assignments in their course work were concerned with writing, such as term papers, critiques, and written examinations.

Hypothesis 7, that no significant differences existed between the Mean Final GPA of men and women, was rejected for the total group. The women were found to have significantly higher Mean GPA Scores than did the men for

the total group, indicating that the female participants got better grades than the male participants as a whole.

Hypothesis 8, that no significant differences existed between the Mean Final GPA of supervisors/administrators, and teachers was accepted for the 1967, 1968, 1969 and total groups. It indicates that no significant difference existed between the Mean GPA of the two groups, indicating no relationship between previous positions and academic achievement of the Thai participants in Thailand Comprehensive School Project.

Hypothesis 9, that the Mean Final GPA of teachers of English was significantly higher than the Mean Final GPA of teachers of other subjects, was accepted for the 1968 and the total groups. The Mean Final GPA of teachers of English was found to have significantly higher Mean GPA than did the teachers of other subjects for the 1968 group and for the total group. It can be stated that teachers of English in Thailand Comprehensive School Project as a whole got better grades than did the teachers of other subjects. The results imply that areas of specialization, experience abroad are factors affecting Thai participants' academic achievement.

Hypothesis 10, that no significant difference existed between the ranks of the Mean TOEFL Subtest Scores and the ranks of the Mean Affective Scores in Summer and Fall Administrations for the 1969 group, was rejected, indicating a significant difference between performance on each TOEFL Subtest and felt difficulty of each TOEFL Subtest.

The Summer and Fall Vocabulary were the Most Difficult TOEFL Subtests, while the Summer and Fall Listening Comprehension were the Felt Most Difficult TOEFL Subtests. Congruence existed for ranks of the Mean Reading Comprehension and the ranks of the Mean English Structure. The Summer and Fall Reading Comprehension were felt to be second to the most difficult TOEFL Subtests, the Summer and Fall English Structure were felt to be the least difficult TOEFL Subtests.

Hypothesis 11, that no significant differences existed between the ranks of the Mean Felt Difficulty Scores and the ranks of the Mean Time-Pressure Scores of Summer and Fall TOEFL Subtests for the 1969 group, was accepted. It indicates congruence between felt difficulty of each Summer TOEFL Subtest, and the felt time-pressure of each Summer TOEFL Subtest. Similarly, there existed such congruence for the Fall TOEFL Subtests.

Hypothesis 12, that no significant differences existed between the ranks of the Mean Felt Difficulty Scores of Summer and Fall TOEFL Subtests for the 1969 group, was accepted, indicating no significant difference between felt difficulty of each Summer TOEFL Subtest and felt difficulty of each Fall TOEFL Subtest. The Summer and Fall Listening Comprehension were felt to be the most difficult TOEFL Subtests. This was followed by the Summer and Fall Reading Comprehension. The Summer and Fall English Structure were felt to be the least difficult.

Chapter 5

SUMMARY, CONCLUSIONS AND IMPLICATIONS

SUMMARY

The Problem

The purpose of the study was to investigate the relationship between and among the scores of various English proficiency tests and the Final GPA of the Thai participants in Thailand Comprehensive School Project at The University of Alberta. Attempts were made to determine predictors of Final GPA from among the English proficiency tests used, to investigate some of the participants' characteristic factors that affect their Final GPA, and finally, to identify their strengths and weaknesses with respect to their English proficiency. It was hoped that the findings will be helpful for the improvement of the selection, diagnosis and placement procedures for the Thai participants to study at The University of Alberta.

The Sample

The experimental sample consisted of 98 Thai participants of Thailand Comprehensive School Project in 1967, 1968 and 1969 diploma program at The University of Alberta.

Instruments

The students completed the following tests:

1. TOEFL (1967, 1968 and 1969 groups)
2. Interview Panel Ratings (1967 group only)
3. Interview Panel Ratings (1968 group only)
4. Questionnaire (1969 group only).

Data Collection

The main source of data was the file of the Thailand Comprehensive School Project Office, Edmonton. The data obtained included the various English Proficiency Test Scores previously noted, the Final GPA Scores and the information on the participants' records concerning their experiences.

The twenty-five questionnaires were distributed to the 1969 group of Thai participants before they left Canada. The number of questionnaires returned was 24, which represented a 96 percent return.

Results

Using Pearson product moment correlation, stepwise regression analysis, t tests and Spearman rho correlation, ten null hypotheses and two directional hypotheses were tested, with the following results:

1. Significant positive relationships existed between the Summer and Fall Total TOEFL Scores and the Final GPA for the 1967, 1968, 1969 and total groups except for the 1967 Summer TOEFL Scores.

2. Significant positive relationships existed between the Summer and Fall TOEFL Subtest Scores and the Final GPA for the 1967, 1968, 1969 and total groups.

3. No significant relationship existed between the Interview Panel Rating (1967) Scores and the Final GPA.

4. Significant positive relationships existed between the Interview Panel Rating (1968) Subtest Scores and the Final GPA.

5. Significant positive relationships existed between the Interview Panel Rating (1967) Scores and the Summer and Fall Total TOEFL Scores.

6. Significant positive relationships existed between the Interview Panel Rating (1968) Subtest Scores and the Final GPA.

7. The Summer TOEFL Writing Ability Score and the Summer TOEFL Vocabulary Score were the best predictors of Final GPA for the 1967 group, the Language Fluency Score was such for the 1968 group, the Summer Total TOEFL Score for the 1969 group, and the Summer TOEFL Writing Ability Score for the total group of the Thai participants.

8. The Mean Final GPA Score of women was significantly higher than that of men for the 1968 and total groups.

9. No significant differences existed between the Mean Final GPA Scores of supervisors/administrators, and teachers for the 1967, 1968, 1969 and total groups.

10. The Mean Final GPA Scores of teachers of

English was significantly higher than that of teachers of other subjects for the 1968 and total groups.

11. Significant differences existed between the ranks of the Mean TOEFL Subtest Scores and the ranks of the Mean Affective Scores for the 1969 group. The TOEFL Subtest Scores show that the most difficult subtest of TOEFL was Vocabulary, but by Felt Difficulty Scores, it was Listening Comprehension.

12. No significant differences existed between the ranks of the Mean Felt Difficulty Scores and the ranks of the Mean Felt Time-Pressure Scores of Summer and Fall TOEFL Subtests.

13. No significant differences existed between the ranks of the Mean Felt Difficulty Scores between Summer and Fall TOEFL Subtests. The Listening Comprehension Subtest was felt to be the most difficult, the English Structure the least difficult.

14. The number of participants and the GPA were higher for those with gain in Total TOEFL Scores between Summer and Fall administrations than those with loss.

CONCLUSIONS

1. Both Standardized Tests of English as a Foreign Language and the Interview Panel Ratings (1968) are useful as screening devices and as predictors of academic achievement at The University of Alberta.

2. Language Tests vary in their characteristics

as predictors according to the profile of the students sampled.

3. No congruence existed between felt degree of difficulty and actual ranking of results.

4. The higher the competence in English the participants had, the higher the Final Grade Point Averages they get. The participants' competence in English, especially their ability to write, was associated to their success in studying at The University of Alberta.

5. The Summer Language Program appeared to be important in eliminating one of the many causes of failure and contributing to the success of the Thai participants at The University of Alberta.

6. Motivation factor (Potential for the Alberta Program) is an important factor affecting the Thai participants' academic achievement.

IMPLICATIONS

Implications for The University of Alberta

The Interview Panel Ratings (1968) and the Summer administration of TOEFL indicate their effectiveness in the prediction of Final GPA. These tests should be retained as screening instruments in the selection of the Thai participants to study at The University of Alberta. Emphasis should be placed on the Writing Ability Scores, Language Fluency and the Total TOEFL Scores.

The University of Alberta should be aware that the majority of men receive lower GPA than do the women. It implies that female candidates have more chance to achieve success when academic achievement is a criterion of success. In addition, the teachers of English receive higher GPA than do the teachers of other subject areas. Therefore, in one sense, the teachers of English and female candidates are preferable for selection.

A relationship existed between the English Proficiency Scores and the Final GPA Scores. It is suggested that the participants' academic success, to some extent, depends on their competence in English. This leads to the implication that the decision for the selection of the Thai participants to study abroad should be based on their English proficiency as a priority criterion.

The Affective Scores imply that an attempt should be made by The University of Alberta to encourage the participants' self-confidence in their specific areas of weaknesses. They should be placed in the type of class from which they are most likely to profit. This can be accomplished through the Summer Language Program. Programs of practice which place more emphasis on listening, speaking and reading skills but less emphasis on the English Structure should be established.

The Mean TOEFL Subtest Score indicated that the Vocabulary and the Reading Comprehension were most

difficult subtests of all and the English Structure was the least difficult. It implies that the Vocabulary which related to the participants' fields of study should be an additional emphasis in the Summer Language Program.

Implications for Further Study

Further study may be conducted in the following areas:

1. The same type of study should be conducted to ascertain whether:

- (a) there is any significant relationship between the Final Grade Point Averages and age, amount of previous English training in Thailand and experience abroad, and

- (b) there is any significant difference in the Final Grade Point Averages between subgroups by place abroad, previous positions in Thailand other than supervisors, administrators and teachers, areas of specialization, major and minor fields of study in Thailand and overseas, and the major fields at The University of Alberta and those with gain or loss in the Total TOEFL Scores between the Summer and Fall administrations.

2. Investigation related to the question as to why the Thai participants gain or lose in their total TOEFL scores in the Fall administrations after they had training experiences in Summer Language Program Investigation should focus into each individual participant in terms of causes that affect each participant's achievement.

BIBLIOGRAPHY

Allen, W. P.

1971. "Correlation Between Michigan and TOEFL Scores at the University of Houston," Unpublished manuscript, pp. 1-5, Spring, citing John Cox at The University of Houston.

Burke, J. D.

1968. "The Predictive Validity of English Language Screening Instruments for Foreign Students Entering the University of Southern California," Unpublished Doctoral Thesis, University of Southern California.

Burke, J. D., et al.

1969. "The Criterion-Related Validity of English Language Screening Instruments for Foreign Students Entering the University of Southern California," Educational and Psychological Measurement, 29: 503-506.

Chelmers, P. N.

1964. "Integration of the Test of English as a Foreign Language (TOEFL) Scores," Unpublished Memorandum, Foreign Student Office, Massachusetts Institute of Technology.

College Entrance Examination Board (CEEB) and Educational Service

1970. "Test of English as a Foreign Language: Interpretive Information," revised January. New York, New Jersey and Princeton. pp. 1-28.

Cox, John

1971. Cited by Walter P. Allen, "Correlation Between Michigan and TOEFL Scores at The University of Houston," Unpublished Manuscript, pp. 1-5, Spring.

Darnell, D. K.

1970. "Clozentropy: A Procedure of Testing English Language Proficiency of Foreign Students: TOEFL Test," Speech Monograph 37:36-45, No. 1, March.

Deane, S. G., et al.

1969. Final Report: Comprehensive School Project No. 1, First Canadian Advisory Team, Department of Secondary Education, Ministry of Education, Bangkok: July.

Dizeny, H.

1965. "Concurrent Validity of the Test of English as a Foreign Language Students at an American University," Educational and Psychological Measurement, 25:1129-1131, No. 4.

Domino, G.

1966. "Academic Achievement and English Proficiency of Foreign Students as Predicted by the Test of English as a Foreign Language. Fordham University, Unpublished Manuscript.

Educational Testing Service

1965. "Comparison of Test of English as a Foreign Language Scores and University Ratings at Four United States Institutions," Memorandum transmitting score on the Test of English as a Foreign Language. Princeton: ETS, unpublished manuscript, pp. 3-4.

Educational Testing Service

1966. "Testing Programs, Special Services, Instructional Activities." Princeton, New Jersey, pp. 7-54.

Educational Testing Service

1966. "Test of English as a Foreign Language (TOEFL) Research--Correlations Among TOEFL, American Language Institute (ALI) and Michigan test," July, E.T.S.

Ferguson, George A.

1966. Statistical Analysis in Psychology and Education, New York: McGraw-Hill.

Holtzman, Paul

Cited by Bernard Spolsky "Do They Know Enough English?" NAFSA Studies and Papers, English Language Series Number 13: Selected Conference Papers of the Association of Teachers of English as a Second Language, Published by The National Association for Foreign Student Affairs, Language Research Associate's Press, Los Altos, California, pp. 30-44, December.

Hountras, P. T.

1957. "The Relationship between Pre-Admission Data and Achievement of Foreign Graduate Students," The Journal of Educational Psychology, 48:157-163, No. 3, March.

Hountras, P. T.

1957. "Factors Related to Academic Probation Among Foreign Graduate Students," School and Society, 85:311-312, October.

Howell, J. J.

1966. "Prediction of Freshman Grade Point Average of Foreign Students at U.S.A. Institutions of Higher Learning--A Pilot Project," New Jersey Educational Research, Pennington, New Jersey, pp. 24-29, April.

Hwang, K. Y., and Dizney, H.

1970. "Predictive Validity of the Test of English as a Foreign Language for Chinese Graduate Students at an American University," Educational and Psychological Measurement, 30:475-477, Summer.

Jones, R. A., Kaplan, R. and Michael, W. B.

1964. "The Predictive Validity of a Modified Battery of Tests in Language Skills for Foreign Students at an American University," Educational and Psychological Measurement, 24:961-965, No. 4.

Jones, R. A. and Michael, W. B.

1961. "The Validity of a Battery of Tests in Communication Skills for Foreign Students Attending an American University," Educational and Psychological Measurement, 21:393-496, No. 2.

Juola, A. E.

1960. "Predictive Validity of Five College-Level Academic Aptitude Tests at One Institution," Personnel and Guidance Journal, 38:637-641.

Kaplan, R. B.

1967. "TOEFL-Test of English as a Foreign Language," Selected Conference Papers of the Association of Teachers of English as a Second Language, NAFSA Studies and Papers, English Language, Language Research Associate's Press, Los Altos, California, pp. 30-44, No. 13, December.

Kraft, R. J.

1964. Education in Thailand: Student Background and University Admission No. 6, Educational Planning Office, Ministry of Education, Bangkok, pp. 1-54.

Loyd, W. P.

1965. "Socio-Academic Problems of Graduate Students from Other Lands," The Graduate Student: Proceedings of the Fifth Annual Meeting of the Council of Graduate Schools in the United States, pp. 121-126, December.

Maxwell, A.

1965. "A Comparison of Two English as a Foreign Language Tests," University of California (Davis), Unpublished Manuscript.

Mestenhauser, J. A.

1961. Research in Programs for Foreign Students: A Report of the Waldenwoods Seminar, New York: National Association of Foreign Student Advisors, June.

Michael, W. B. and Jones, R. A.

1963. "Stability of Predictive Validities of High School Grades and of Scores on the Scholastic Aptitude Test of the College Entrance Examination Board for Liberal Arts Students," Educational and Psychological Measurement, 23:375-378.

Mulligan, A. C.

1966. "Evaluating Foreign Credentials," College and University, 41:307-313.

Nimmanheminda, S.

1970. "Higher Education in Thailand," Journal of the National Education Council, pp. 1-49, No. 6, January.

Palmer, L. A.

- 1965- "TOEFL: Test of English as a Foreign Language,"
1966. North Catholic Educational Association Bulletin, 62:235-238.

Plaister, T.

1968. "Testing Aural Comprehension," Problems in Foreign Language Testing, Language Learning: A Journal of Applied Linguistics, Special Issue No. 3, 18: 103-109, August.

Shaw, A. B. and Buasri, T.

1964. Education in Thailand: Teachers in Thailand's Universities, No. 4, Educational Planning Office, Ministry of Education, Bangkok, pp. 1-92.

Spolsky, B.

1967. "Do They Know Enough English?" NAFSA Studies and Papers, English Language Series Number 13: Selected Conference Papers of the Association of Teachers of English as a Second Language, Published by The National Association for Foreign Student Affairs, Language Research Associate's Press, Los Altos, California, pp. 30-44, December.

Sugimoto, R. A.

1966. "The Relationship of Selected Predictive Variables to Foreign Students Achievement at the University of California, Los Angeles," Dissertation Abstracts, 28:65.

Upshur, J. A.

1967. "English Language Tests and Prediction of Academic Success," NAFSA Studies and Papers, English Language Series Number 13: Selected Conference Papers of the Association of Teachers of English as a Second Language, Published by The National Association for Foreign Student Affairs, Language Research Associate's Press, Los Altos, California, pp. 85-92, December.

Vick, C. M. and Hornaday, J. A.

1962. "Predicting Grade Point Average at a Small Southern College," Educational and Psychological Measurement, 22:795-799.

APPENDIX A

QUESTIONNAIRE

AN INVESTIGATION OF FEELINGS TOWARDS THE SUMMER AND
FALL T.O.E.F.L. TEST EXPERIENCES OF THE THAI
STUDENTS IN THE COMPREHENSIVE SCHOOL PROJECT

UNIVERSITY OF ALBERTA, 1969/70

This questionnaire is designed to be used in the study investigating your feelings towards the Summer and Fall T.O.E.F.L. and the factors that affect your achievement.

Encircle the number indicating the degree of your feelings concerning the Summer and Fall T.O.E.F.L. Test experiences according to the code below.

	1	2	3	4	5
	Very Low	Low	Medium	High	Very High
	Summer - First Test				
	Fall - Second Test				
1. The degree of improvement in my English between first and second TOEFL tests.	1	2	3	4	5
2. The degree of my readiness before the first test.	1	2	3	4	5
3. The degree of my readiness before the second test.	1	2	3	4	5
4. The degree of difficulty of the whole first test.	1	2	3	4	5
5. The degree of difficulty of the whole second test.	1	2	3	4	5
6. The degree of difficulty of the subtests in the first test.					
1. Listening comprehension	1	2	3	4	5
2. English structure	1	2	3	4	5
3. Vocabulary	1	2	3	4	5
4. Reading comprehension	1	2	3	4	5
5. Writing ability	1	2	3	4	5

7. The degree of difficulty of the subtests in the second test.
 1. Listening comprehension 1 2 3 4 5
 2. English structure 1 2 3 4 5
 3. Vocabulary 1 2 3 4 5
 4. Reading comprehension 1 2 3 4 5
 5. Writing ability 1 2 3 4 5
8. The time pressure felt in completing the sections of the first test.
 1. Listening comprehension 1 2 3 4 5
 2. English structure 1 2 3 4 5
 3. Vocabulary 1 2 3 4 5
 4. Reading comprehension 1 2 3 4 5
 5. Writing ability 1 2 3 4 5
9. The time pressure felt in completing the sections of the second test.
 1. Listening comprehension 1 2 3 4 5
 2. English structure 1 2 3 4 5
 3. Vocabulary 1 2 3 4 5
 4. Reading comprehension 1 2 3 4 5
 5. Writing ability 1 2 3 4 5
10. My feeling of general health before the first test. 1 2 3 4 5
11. My feeling of general health before the second test. 1 2 3 4 5

APPENDIX B

Distribution of Participants by Their Previous Positions in
Thailand by Program Year and Total Group

Positions	1967			1968			1969			Total Group		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Supervision	1	5	6	3	4	7	1	2	3	5	11	16
Industrial Art, Vocational Education & Business Education	1	2	3	6	1	7	3	2	5	10	5	15
Guidance & Counseling	2	..	2	1	..	1	1	1	2	4	1	5
Principal	8	..	8	4	1	5	1	..	1	13	1	14
Social Studies	1	..	1	..	..	..	..	..	..	1	..	1
English & Library	4	2	6	5	9	14	5	5	10	14	16	30
French	..	..	..	..	1	1	..	..	..	..	1	1
Thai	1	1	2	..	..	..	..	1	1	1	2	3
Sciences	9	..	9	1	1	2	2	..	2	12	1	13
Total	27	10	37	20	17	37	13	11	24	60	38	98

APPENDIX C

Distribution of Participants by Their Major Fields of Study
in Thailand by Program Years and Total Group

Major Fields	1967			1968			1969			Total Group		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Industrial Art, Vocational Education & Business Education	1	2	3	6	1	7	4	2	6	11	5	16
Guidance & Counseling	..	..	..	..	..	..	..	1	1	..	1	1
Administration	..	..	..	1	..	1	..	..	..	1	..	1
Social Studies	2	1	3	..	..	..	1	..	1	3	1	4
English	6	5	11	6	8	14	4	3	7	16	16	32
French	..	..	..	1	..	1	..	..	..	1	..	1
Thai	1	2	3	1	4	5	1	..	1	3	6	9
Sciences	14	..	14	..	..	..	2	2	4	16	2	18
Mathematics	2	..	2	5	3	8	1	3	4	8	6	14
No Information	1	..	1	..	1	1	..	..	..	1	1	2
Total	27	10	37	20	17	37	13	11	24	60	38	98

APPENDIX D

Distribution of Participants by Their Minor Fields of
Study by Program Years and Total Group

Minor Fields	1967			1968			1969			Total Group		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Industrial Art, Vocational Education & Business Education	..	..	..	1	..	1	..	..	..	1	..	1
Guidance & Counseling	3	..	3	1	..	1	1	1	2	5	1	6
Social Studies	1	..	1	5	3	8	2	..	2	8	3	11
English	3	1	4	4	2	6	2	5	7	9	8	17
French	..	1	1	1	3	4	1	..	1	2	4	6
Thai	2	4	6	1	3	4	..	3	3	3	10	13
Sciences	1	..	1	2	2	4	1	1	2	4	3	7
Mathematics	9	2	11	2	..	2	3	1	4	14	3	17
Library Science	..	..	..	..	1	1	1	..	1	1	1	2
No Information	8	2	10	3	3	6	2	..	2	13	5	18
Total	27	10	37	20	17	37	13	11	24	60	38	98

APPENDIX E

Number of Participants and Places of Study Overseas
by Program Years and Total Group

Year	United States			New Zealand			England			Philippines			Total Group		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
1967	6	2	8	1	1	2	..	..	..	1	1	1	7	4	11
1968	3	6	9	..	..	..	..	1	1	..	..	..	3	7	10
1969	1	1	2	..	..	..	..	..	..	1	..	1	2	1	3
Total	10	9	19	1	1	2	..	1	1	1	1	2	12	12	24

B30017